

Reference	Description of report	Due date
63.1417(h)(5)	Notification of added emission points	180 days prior to the appropriate compliance date.
63.1417(h)(6)	Notification that a small control device has been redesignated as a large control device.	Within 60 days of the redesignation of control device size.
63.1417(h)(7)	Notification of process change	Within 60 days after performance test or applicability assessment, whichever is sooner.
63.1417(h)(8)	Electronic reporting	Within 60 days after completing performance test.

^a Note that the APPU remains subject to this subpart until the notification under § 63.1400(g)(7) is made.

[65 FR 3290, Jan. 20, 2000, as amended at 79 FR 60935, Oct. 8, 2014]

TABLE 6 TO SUBPART OOO OF PART 63—COEFFICIENTS FOR TOTAL RESOURCE EFFECTIVENESS ^A

Control device basis	Values of coefficients		
	A	B	C
Flare	5.276×10^{-1}	9.98×10^{-2}	2.096×10^{-3}
Thermal Incinerator 0 Percent Recovery	4.068×10^{-1}	1.71×10^{-2}	8.664×10^{-3}
Thermal Incinerator 70 Percent Recovery	6.868×10^{-1}	3.21×10^{-3}	3.546×10^{-3}

^a Use according to procedures outlined in this section.
 MJ/scm=MegaJoules per standard cubic meter.
 scm/min=Standard cubic meters per minute.

Subpart PPP—National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production

SOURCE: 64 FR 29439, June 1, 1999, unless otherwise noted.

§ 63.1420 Applicability and designation of affected sources.

(a) *Definition of affected source.* The provisions of this subpart apply to each affected source. Affected sources are described in paragraphs (a)(1) through (4) of this section.

(1) An affected source is either an existing affected source or a new affected source. Existing affected source is defined in paragraph (a)(2) of this section, and new affected source is defined in paragraph (a)(3) of this section.

(2) An existing affected source is defined as the group of one or more polyether polyol manufacturing process units (PMPUs) and associated equipment, as listed in paragraph (a)(4) of this section, that is not part of a new affected source, as defined in paragraph (a)(3) of this section, and that is located at a plant site that is a major source.

(3) A new affected source is defined as a source that meets the criteria of

paragraph (a)(3)(i), (ii), or (iii) of this section. The situation described in paragraph (a)(3)(i) of this section is distinct from those situations described in paragraphs (a)(3)(ii) and (iii) of this section.

(i) At a site without organic HAP emission points before September 4, 1997 (i.e., a “greenfield” site), the group of one or more PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, that is part of a major source, and on which construction for the PMPU(s) commenced after September 4, 1997;

(ii) The group of one or more PMPUs meeting the criteria in paragraph (g)(1)(i) of this section; or

(iii) A reconstructed affected source meeting the criteria in paragraph (g)(2)(i) of this section.

(4) The affected source also includes the emission points and components specified in paragraphs (a)(4)(i) through (vi) of this section that are associated with a PMPU (or a group of PMPUs) making up an affected source, as defined in § 63.1423.

(i) Each waste management unit.

(ii) Maintenance wastewater.

(iii) Each heat exchange system.

(iv) Components required by or utilized as a method of compliance with

this subpart, which may include control techniques and recovery devices.

(v) Product finishing operation.

(vi) Each feed or catalyst operation.

(b) *PMPUs without organic HAP.* The owner or operator of a PMPU that is part of an affected source, as defined in paragraph (a) of this section, but that does not use or manufacture any organic HAP during the production of one or more products is only subject to the provisions of this subpart as specified in paragraph (b)(1) or (2) of this section, as applicable. Products or raw material(s) containing organic HAP as impurities only are not considered organic HAP for the purposes of this paragraph.

(1) If an organic HAP is not used or manufactured in the production of polyether polyols, the PMPU is not subject to any provisions of this subpart, except that the owner or operator shall comply with either paragraph (b)(1)(i) or (ii) of this section. The owner or operator is not required to comply with the provisions of 40 CFR part 63, subpart A (the General Provisions) for that PMPU.

(i) Retain information, data, and analyses used to document the basis for the determination that the PMPU does not use or manufacture any organic HAP. Types of information that could document this determination include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

(ii) When requested by the Administrator, demonstrate that the PMPU does not use or manufacture any organic HAP.

(2) If an organic HAP is used or manufactured in the production of polyether polyols, but an organic HAP is not used in the production of one or more products that are not polyether polyols, the PMPU is not subject to any provision of this subpart other than paragraph (b)(1)(i) or (ii) of this section during the production of the non-polyether polyol products that do not use or manufacture any organic HAP.

(c) *Emission points included in the affected source but not subject to the provisions of this subpart.* The affected source

includes the emission points listed in paragraphs (c)(1) through (12) of this section, but these emission points are not subject to the requirements of this subpart or the provisions of 40 CFR part 63, subpart A.

(1) Components and equipment that do not contain organic HAP or that contain organic HAP as impurities only and are located at a PMPU that is part of an affected source.

(2) Stormwater managed in segregated sewers.

(3) Water from fire-fighting and deluge systems in segregated sewers.

(4) Spills.

(5) Water from safety showers.

(6) Water from testing of deluge systems.

(7) Water from testing of firefighting systems.

(8) Vessels that store and/or handle material that contains no organic HAP or organic HAP as impurities only.

(9) Equipment that operates in organic HAP service for less than 300 hours during the calendar year.

(10) Loading racks, loading arms, or loading hoses that only transfer liquids containing HAP as impurities.

(11) Loading racks, loading arms, or loading hoses that vapor balance during all loading operations.

(12) Utility fluids, such as heat transfer fluids.

(d) *Processes excluded from the affected source.* The processes specified in paragraphs (d)(1) through (3) of this section are not part of the affected source and are not subject to the requirements of both this subpart and subpart A of this part.

(1) Research and development facilities.

(2) Solvent reclamation, recovery, or recycling operations at hazardous waste treatment, storage, and disposal facilities (TSDF) requiring a permit under 40 CFR part 270 that are not part of a PMPU to which this subpart applies.

(3) Reactions or processing that occur after the epoxide polymerization is complete and after all catalyst removal steps, if any, are complete.

(e) *Primary product determination and applicability.* An owner or operator of a process unit that produces or plans to

produce a polyether polyol shall determine if the process unit is subject to this subpart in accordance with this paragraph.

(1) *Initial primary product determination.* The owner or operator shall initially determine the primary product of each process unit in accordance with paragraphs (e)(1)(i) through (iii) of this section.

(i) If a process unit manufactures only one product, then that product shall represent the primary product of the process unit.

(ii) If a process unit produces more than one intended product at the same time, the primary product shall be determined in accordance with paragraph (e)(1)(ii)(A) or (B) of this section.

(A) The product for which the process unit has the greatest annual design capacity on a mass basis shall represent the primary product of the process unit, or

(B) If a process unit has the same maximum annual design capacity on a mass basis for two or more products and if one of those products is a polyether polyol, then the polyether polyol shall represent the primary product of the process unit.

(iii) If a process unit is designed and operated as a flexible operation unit, the primary product shall be determined as specified in paragraph (e)(1)(iii)(A) or (B) of this section based on the anticipated operations for the 5 years following September 4, 1997 for existing process units, or for the first year after the process unit begins production of any product for the new process units. If operations cannot be anticipated sufficiently to allow the determination of the primary product for the specified period, applicability shall be determined in accordance with paragraph (e)(2) of this section.

(A) If the flexible operation unit will manufacture one product for the greatest operating time over the specified 5-year period for existing process units, or the specified 1-year period for new process units, then that product shall represent the primary product of the flexible operation unit.

(B) If the flexible operation unit will manufacture multiple products equally based on operating time, then the product with the greatest expected produc-

tion on a mass basis over the specified 5-year period for existing process units, or the specified 1-year period for new process units shall represent the primary product of the flexible operation unit.

(iv) If, according to paragraph (e)(1)(i), (ii), or (iii) of this section, the primary product of a process unit is a polyether polyol, then that process unit shall be designated as a PMPU. If the plant site is a major source, that PMPU and associated equipment, as listed in paragraph (a)(4) of this section, is either an affected source or part of an affected source comprised of one or more other PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, and subject to this subpart. If the primary product of a process unit is not a polyether polyol, then that process unit is not a PMPU.

(2) *Provisions if primary product cannot be determined.* If the primary product cannot be determined for a flexible operation unit in accordance with paragraph (e)(1)(iii) of this section, applicability shall be determined in accordance with this paragraph.

(i) If the owner or operator can determine that a polyether polyol is not the primary product, then that flexible operation unit is not a PMPU.

(ii) If the owner or operator cannot determine that a polyether polyol is not the primary product as specified in paragraph (e)(2)(i) of this section, applicability shall be determined in accordance with paragraph (e)(2)(ii)(A) or (B) of this section.

(A) If the flexible operation unit is an existing process unit, the flexible operation unit shall be designated as a PMPU if a polyether polyol was produced for 5 percent or greater of the total operating time of the flexible operation unit since September 4, 1997.

(B) If the flexible operation unit is a new process unit, the flexible operation unit shall be designated as a PMPU if the owner or operator anticipates that a polyether polyol will be manufactured in the flexible operation unit at any time in the first year after the date the unit begins production of any product.

(3) *Annual applicability determination for non-PMPUs that have produced a*

polyether polyol. Once per year beginning June 1, 2004, the owner or operator of each flexible operation unit that is not designated as a PMPU, but that has produced a polyether polyol at any time in the preceding 5-year period or since the date that the unit began production of any product, whichever is shorter, shall perform the evaluation described in paragraphs (e)(3)(i) through (iii) of this section. However, an owner or operator that does not intend to produce any elastomer product in the future, in accordance with paragraph (e)(9) of this section, is not required to perform the evaluation described in paragraphs (e)(3)(i) through (iii) of this section.

(i) For each product produced in the flexible operation unit, the owner or operator shall calculate the percentage of total operating time over which the product was produced during the preceding 5-year period.

(ii) The owner or operator shall identify the primary product as the product with the highest percentage of total operating time for the preceding 5-year period.

(iii) If the primary product identified in paragraph (e)(3)(ii) is a polyether polyol, the flexible operation unit shall be designated as a PMPU. The owner or operator shall notify the Administrator no later than 45 days after determining that the flexible operation unit is a PMPU, and shall comply with the requirements of this subpart in accordance with paragraph (g)(1) of this section for the flexible operation unit.

(4) *Applicability determination for non-PMPUs that have not produced a polyether polyol*. The owner or operator that anticipates the production of a polyether polyol in a process unit that is not designated as a PMPU, and in which no polyether polyol products have been produced in the previous 5-year period or since the date that the process unit began production of any product, whichever is shorter, shall use the procedures in paragraph (e)(1) or (2) of this section to determine if the process unit is designated as a PMPU, with the exception that for existing process units, owners or operators shall project production for the 5 years following the date that the owner or operator anticipates initiating the production of a

polyether polyol, instead of the 5 years following September 4, 1997. If the unit is designated as a PMPU, the owner or operator shall comply in accordance with paragraph (g)(1) of this section.

(5) *Applicability of requirements for PMPUs that are flexible operation units*. The owner or operator of PMPUs that are flexible operation units shall comply with the provisions of this subpart in accordance with paragraphs (e)(5)(i) through (iii) of this section.

(i) *Control requirements*. The owner or operator shall comply with the control requirements of this subpart in accordance with paragraphs (e)(5)(i)(A) and (B) of this section.

(A) During periods when the PMPU produces polyether polyols, the owner or operator shall comply with the provisions of this subpart.

(B) During periods when the PMPU produces products other than polyether polyols, the owner or operator is not required to install additional combustion, recovery, or recapture devices (to otherwise demonstrate compliance). However, the owner or operator shall continue to operate any existing combustion, recovery, or recapture devices that are required for compliance during the production of polyether polyols, with the exceptions provided in paragraph (e)(5)(iv) of this section. If extended cookout (ECO) is the control technique chosen for epoxide emission reduction, then ECO or a control technique providing an equivalent reduction in epoxide emissions should continue to be used for epoxide emission reduction, if the non-polyether polyol being produced uses epoxide monomers.

(ii) *Monitoring requirements*. The owner or operator shall comply with the monitoring requirements of this subpart in accordance with paragraphs (e)(5)(ii)(A) and (B) of this section, and paragraph (e)(5)(ii)(C) of this section if applicable.

(A) The owner or operator shall establish a single parameter monitoring level (for each parameter required to be monitored at each device subject to monitoring requirements) in accordance with § 63.1438(a) based on emission point and control technique characteristics when polyether polyol is being produced.

(B) The owner or operator shall monitor each parameter at each device subject to monitoring requirements at all times (during periods when the PMPU produces polyether polyols, and during periods when the PMPU produces products other than polyether polyols), with the exceptions provided in paragraph (e)(5)(iv) of this section.

(C) If ECO is used to reduce epoxide emissions, a parameter monitoring level shall be established for the production of non-polyether polyol products as the average of the established parameter levels for all product classes produced. During periods when products other than polyether polyols are produced, the ECO shall be performed so that the parameter monitoring level established for the production of non-polyether polyol products is maintained when the ECO is used as a control technique.

(iii) *Group determinations.* For emission points where the owner or operator is required to determine if the emission point is Group 1 according to the definitions in § 63.1423 (storage vessels, process vents for nonepoxy organic HAP emissions used to make or modify the product, and wastewater), the owner or operator shall determine the group status based on emission point characteristics when polyether polyol is being manufactured. Group 1 emission points shall be controlled in accordance with paragraph (e)(5)(i) of this section.

(iv) *Exceptions.* During periods when products described in paragraphs (e)(5)(iv)(A) and (B) of this section are produced, the owner or operator is not required to comply with the provisions of this subpart.

(A) Products in which no organic HAP is used or manufactured, provided that the owner or operator comply with paragraph (b)(2) of this section.

(B) Products that make the PMPU subject to 40 CFR part 63, subpart GGG (Pharmaceuticals Production NESHAP).

(6)–(7) [Reserved]

(8) *Requirements for flexible process units that are not PMPUs.* If it is determined that a process unit is not subject to this subpart, the owner or operator shall either retain all information, data, and analysis used to document

the basis for the determination that the process unit is not a PMPU, or, when requested by the Administrator, demonstrate that the process unit is not a PMPU.

(9) *PMPUs terminating production of all polyether polyols.* If a PMPU terminates the production of all polyether polyols, and the owner or operator does not anticipate the production of any polyether polyols in the future in that PMPU, the process unit is no longer a PMPU and is not subject to this subpart after notification is made to the Administrator. This notification shall be accompanied by a rationale for why it is anticipated that no polyether polyols will be produced in the process unit in the future.

(10) *Redetermination of applicability to PMPUs that are flexible operation units.* Whenever changes in production occur that could reasonably be expected to change the primary product of a PMPU that is operating as a flexible operation unit from a polyether polyol to a product that would make the process unit subject to another subpart of this part, the owner or operator shall reevaluate the primary product, in accordance with paragraphs (e)(3)(i) and (ii) of this section. If the conditions in paragraphs (e)(10)(i) through (iii) of this section are met, the flexible operation unit shall no longer be designated as a PMPU after the compliance date of the other subpart, and shall no longer be subject to the provisions of this subpart after the date that the process unit is required to be in compliance with the provisions of the other subpart. If the conditions in paragraphs (e)(10)(i) through (iii) of this section are not met, the flexible operation unit shall continue to be considered a PMPU and subject to the requirements of this subpart.

(i) The product identified as the primary product is not polyether polyol;

(ii) The production of the product identified as the primary product is subject to another subpart of this part; and

(iii) The owner or operator submits a notification to the Administrator of the pending change in applicability.

(f) *Storage vessel ownership determination.* The owner or operator shall follow the procedures specified in paragraphs

(f)(1) through (7) of this section to determine to which process unit a storage vessel shall be assigned.

(1) If a storage vessel is already subject to another subpart of 40 CFR part 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories) on June 1, 1999, that storage vessel shall be assigned to the process unit subject to the other subpart, and none of the other provisions in this subpart shall apply to that storage vessel.

(2) If a storage vessel is dedicated to a single process unit, the storage vessel shall be assigned to that process unit.

(3) If a storage vessel is shared among process units, then the storage vessel shall be assigned to that process unit located on the same plant site as the storage vessel that has the greatest input into or output from the storage vessel (i.e., the process unit that has the predominant use of the storage vessel).

(4) If predominant use cannot be determined for a storage vessel that is shared among process units and if only one of those process units is a PMPU subject to this subpart, the storage vessel shall be assigned to that PMPU.

(5) If predominant use cannot be determined for a storage vessel that is shared among process units and if more than one of the process units are PMPUs that have different primary products and that are subject to this subpart, then the owner or operator shall assign the storage vessel to any one of the PMPUs sharing the storage vessel.

(6) If the predominant use of a storage vessel varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding June 1, 1999 or based on the expected utilization for the 5 years following June 1, 1999 for existing affected sources, whichever is more representative of the expected operations for that storage vessel, and based on the expected utilization for the 5 years after initial start-up for new affected sources. The determination of predominant use shall be reported in the Notification of Compliance Status, as required by § 63.1439(e)(5)(v).

(7) Where a storage vessel is located at a major source that includes one or more process units which place material into or receive material from the storage vessel, but the storage vessel is located in a tank farm (including a marine tank farm), the applicability of this subpart shall be determined according to the provisions in paragraphs (f)(7)(i) through (iv) of this section.

(i) The storage vessel may only be assigned to a process unit that utilizes the storage vessel and does not have an intervening storage vessel for that product (or raw materials, as appropriate). With respect to any process unit, an intervening storage vessel means a storage vessel connected by hard-piping to both the process unit and the storage vessel in the tank farm so that product or raw material entering or leaving the process unit flows into (or from) the intervening storage vessel and does not flow directly into (or from) the storage vessel in the tank farm.

(ii) If there is no process unit at the major source that meets the criteria of paragraph (f)(7)(i) of this section with respect to a storage vessel, this subpart does not apply to the storage vessel.

(iii) If there is only one process unit at the major source that meets the criteria of paragraph (f)(7)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to that process unit.

(iv) If there are two or more process units at the major source that meet the criteria of paragraph (f)(7)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to one of those process units according to the provisions of paragraphs (f)(3) through (6) of this section. The predominant use shall be determined among only those process units that meet the criteria of paragraph (f)(7)(i) of this section.

(8) If the storage vessel begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or ceases to receive material from (or send material to) a process unit that was included in the initial determination, the owner or operator shall re-evaluate the applicability of this subpart to that storage vessel.

(g) *Changes or additions to plant sites.* The provisions of this paragraph apply to the owner or operator that changes or adds to their plant site or affected source.

(1) *Adding a PMPU to a plant site.* The provisions of paragraphs (g)(1)(i) and (ii) of this section apply to the owner or operator that adds one or more PMPUs to a plant site. A PMPU may be added to a plant site by constructing or reconstructing a process unit to produce polyether polyols. A PMPU may also be added to a plant site due to changes in production (anticipated production or actual past production) such that a polyether polyol becomes the primary product of a process unit that was not previously a PMPU.

(i) If a group of one or more PMPUs is added to a plant site, the added group of one or more PMPUs and their associated equipment, as listed in paragraph (a)(4) of this section, shall be a new affected source and shall comply with the requirements for a new affected source in this subpart upon initial start-up or by June 1, 1999, whichever is later, if the added group of one or more PMPUs meets the criteria specified in paragraph (g)(1)(i)(A) of this section and either meets the criteria in paragraph (g)(1)(i)(B) or (C) of this section.

(A) The process units are new process units, as defined in § 63.1423.

(B) The added group of one or more PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, has the potential to emit 10 tons per year (9.1 megagrams per year) or more of any organic HAP or 25 tons per year (22.7 megagrams per year) or more of any combination of organic HAP, and polyether polyols are currently produced at the plant site as the primary product of an affected source.

(C) A polyether polyol is not currently produced at the plant site as the primary product of an affected source, and the plant site meets, or after the addition is constructed will meet, the General Provisions' definition of a major source in § 63.2.

(ii) If a group of one or more PMPUs is added to a plant site, and the added group of one or more PMPUs does not meet the criteria specified in para-

graph (g)(1)(i)(A) of this section and one of the criteria specified in either paragraph (g)(1)(i)(B) or (C) of this section, and the plant site meets, or after the addition will meet, the definition of a major source, the owner or operator of the added group of one or more PMPUs and associated equipment, as listed in paragraph (a)(4) of this section, shall comply with the requirements for an existing affected source in this subpart upon initial start-up; by June 1, 2002; or by 6 months after notifying the Administrator that a process unit has been designated as a PMPU (in accordance with paragraph (g)(3) of this section), whichever is later.

(2) *Adding emission points or making process changes to existing affected sources.* The provisions of paragraphs (g)(2)(i), (ii), and (iii) of this section apply to the owner or operator that adds emission points or makes process changes to an existing affected source.

(i) If any components are replaced at an existing affected source such that the criteria specified in paragraphs (g)(2)(i)(A) and (B) of this section are met, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source upon initial start-up or by June 1, 1999, whichever is later.

(A) The replacement of components meets the definition of reconstruction in § 63.1423(b). For purposes of determining whether the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct an entire affected source, the equivalent capital cost shall be the entire potentially affected source; and

(B) Such reconstruction commenced after September 4, 1997.

(ii) If any components are replaced at an existing affected source such that the criteria specified in paragraphs (g)(2)(i)(A) and (B) of this section are not met and that replacement of components creates one or more emission points (i.e., either newly created Group 1 emission points or emission points that change from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, heat exchange systems subject to § 63.1435, or equipment leak components subject § 63.1434), the resulting emission

point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance upon initial start-up or by the appropriate compliance date specified in § 63.1422 (i.e., December 1, 1999 for most equipment leak components subject to § 63.1434, and June 1, 2002 for emission points other than equipment leaks), whichever is later.

(iii) If an addition or process change (not including a process change that solely replaces components) is made that creates one or more Group 1 emission points (i.e., either newly created Group 1 emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, heat exchange systems subject to § 63.1435, or equipment leak components subject to § 63.1434), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by initial start-up or by the appropriate compliance date specified in § 63.1422 (i.e., December 1, 1999 for most equipment leak components subject to § 63.1434, and June 1, 2002 for emission points other than equipment leaks), whichever is later.

(3) *Determining what are and are not process changes.* For purposes of paragraph (g) of this section, examples of process changes include, but are not limited to, additions in process equipment resulting in changes in production capacity; production of a product outside the scope of the compliance demonstration; or whenever there is a replacement, removal, or addition of recovery equipment. For purposes of paragraph (g) of this section, process changes do not include: process upsets, unintentional temporary process changes, and changes that do not alter the equipment configuration and operating conditions.

(4) *Reporting requirements for owners or operators that change or add to their plant site or affected source.* An owner or operator that changes or adds to their plant site or affected source, as discussed in paragraphs (g)(1) and (g)(2) of this section, shall submit a report as specified in § 63.1439(e)(7)(iii).

(h) *Applicability of this subpart.* (1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of nonoperation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies.

(2) The emission limitations set forth in 40 CFR part 63, subpart H, as referred to in the equipment leak provisions in § 63.1434, shall apply at all times except during periods of nonoperation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which § 63.1434 applies.

(3) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with this subpart during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment if the shutdown would contravene requirements applicable to such items of equipment.

(4) *General duty.* At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(i) *Affirmative defense for violation of emission standards during malfunction.* In response to an action to enforce the standards set forth in this subpart, the owner or operator may assert an affirmative defense to a claim for civil

penalties for violations of such standards that are caused by malfunction, as defined at § 63.2. Appropriate penalties may be assessed if the owner or operator fails to meet their burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(1) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the reporting requirements in paragraph (i)(2) of this section, and must prove by a preponderance of evidence that:

(i) The violation:

(A) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and

(B) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(C) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(D) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(ii) Repairs were made as expeditiously as possible when a violation occurred; and

(iii) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(iv) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(v) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

(vi) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(vii) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(viii) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(ix) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(2) *Report.* The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator, with all necessary supporting documentation, that explains how it has met the requirements set forth in paragraph (i)(1) of this section. This affirmative defense report shall be included in the first periodic compliance report, deviation report, or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26498, May 8, 2000; 71 FR 20461, Apr. 20, 2006; 79 FR 17376, Mar. 27, 2014]

§ 63.1421 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§ 63.1420, 63.1422, 63.1424 through 63.1428, and 63.1432 through 63.1436. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart. Where these standards reference another subpart and modify the requirements, the requirements shall be modified as described in this subpart. Delegation of the modified requirements will also occur according to the delegation provisions of the referenced subpart.

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f), as defined in § 63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under § 63.8(f), as defined in § 63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f), as defined in § 63.90, and as required in this subpart.

[68 FR 37359, June 23, 2003]

§ 63.1422 Compliance dates and relationship of this rule to existing applicable rules.

(a) [Reserved]

(b) New affected sources that commence construction or reconstruction after September 4, 1997 shall be in compliance with this subpart (except § 63.1434(c)(3)) upon initial start-up or by June 1, 1999, whichever is later. New affected sources that commenced construction or reconstruction after September 4, 1997, but on or before January 9, 2012, shall be in compliance with the pressure relief device monitoring requirements of § 63.1434(c)(3) by March 27, 2017. New affected sources that commence construction or reconstruction

after January 9, 2012, shall be in compliance with the pressure relief device monitoring requirements of § 63.1434(c)(3) upon initial startup or by March 27, 2014, whichever is later.

(c) Existing affected sources shall be in compliance with this subpart (except for § 63.1434 for which compliance is covered by paragraph (d) of this section) no later than June 1, 2002, as provided in § 63.6(c), unless an extension has been granted as specified in paragraph (e) of this section.

(d) Except as provided for in paragraphs (d)(1) through (6) of this section, existing affected sources shall be in compliance with § 63.1434 no later than December 1, 1999 unless an extension has been granted as specified in paragraph (e) of this section.

(1) Compliance with the compressor provisions of § 63.164 shall occur no later than June 1, 2000 for any compressor meeting one or more of the criteria in paragraphs (d)(1)(i) through (iv) of this section, if the work can be accomplished without a process unit shutdown, as defined in § 63.161.

(i) The seal system will be replaced.

(ii) A barrier fluid system will be installed.

(iii) A new barrier fluid will be utilized which requires changes to the existing barrier fluid system.

(iv) The compressor shall be modified to permit connecting the compressor to a closed vent system.

(2) Compliance with the compressor provisions of § 63.164 shall occur no later than December 1, 2000, for any compressor meeting all the criteria in paragraphs (d)(2)(i) through (iv) of this section.

(i) The compressor meets one or more of the criteria specified in paragraphs (d)(1)(i) through (iv) of this section.

(ii) The work can be accomplished without a process unit shutdown as defined in § 63.161.

(iii) The additional time is necessary, due to the unavailability of parts beyond the control of the owner or operator.

(iv) The owner or operator submits the request for a compliance extension to the appropriate U.S. Environmental Protection Agency Regional Office at the addresses listed in § 63.13 no later than 45 days before December 1, 1999.

The request for a compliance extension shall contain the information specified in § 63.6(i)(6)(i)(A) and (B). Unless the EPA Regional Office objects to the request for a compliance extension within 30 days after receipt of the request, the request shall be deemed approved.

(3) If compliance with the compressor provisions of § 63.164 cannot reasonably be achieved without a process unit shutdown, as defined in § 63.161, the owner or operator shall achieve compliance no later than June 1, 2001. The owner or operator who elects to use this provision shall submit a request for an extension of compliance in accordance with the requirements of paragraph (d)(2)(iv) of this section.

(4) Compliance with the compressor provisions of § 63.164 shall occur not later than June 1, 2002 for any compressor meeting one or more of the criteria in paragraphs (d)(4)(i) through (iii) of this section. The owner or operator who elects to use these provisions shall submit a request for an extension of compliance in accordance with the requirements of paragraph (d)(2)(iv) of this section.

(i) Compliance cannot be achieved without replacing the compressor.

(ii) Compliance cannot be achieved without recasting the distance piece.

(iii) Design modifications are required to connect to a closed-vent system.

(5) Compliance with the surge control vessel and bottoms receiver provisions of § 63.170 shall occur no later than June 1, 2002.

(6) Compliance with the pressure relief device monitoring provisions of § 63.1434(c)(3) shall occur no later than March 27, 2017.

(e) Pursuant to section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing the existing affected source up to 1 additional year to comply with section 112(d) standards. For purposes of this subpart, a request for an extension shall be submitted to the permitting authority as part of the operating permit application, or to the Administrator as a separate submittal, or as part of the Precompliance Report. Requests for extensions shall be submitted no later than 120 days prior to the compliance dates specified in paragraphs (b)

through (d) of this section, or as specified elsewhere in this subpart. The dates specified in § 63.6(i) for submittal of requests for extensions shall not apply to this subpart.

(1) A request for an extension of compliance shall include the data described in § 63.6(i)(6)(i)(A) and (B).

(2) The requirements in § 63.6(i)(8) through (14) shall govern the review and approval of requests for extensions of compliance with this subpart.

(3) An owner or operator may submit a compliance extension request after the date specified in paragraph (e) of this section, provided that the need for the compliance extension arose after that date, and the need arose due to circumstances beyond reasonable control of the owner or operator. This request shall include, in addition to the information specified in paragraph (e)(1) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problem.

(f) Table 1 of this subpart specifies the requirements in 40 CFR part 63, subpart A (the General Provisions) that apply and those that do not apply to owners and operators of affected sources subject to this subpart. For the purposes of this subpart, Table 3 of 40 CFR part 63, subpart F is not applicable.

(g) Table 2 of this subpart summarizes the provisions of 40 CFR part 63, subparts F, G, and H (collectively known as the “HON”) that apply and those that do not apply to owners and operators of affected sources subject to this subpart.

(h) [Reserved]

(i) After the compliance dates specified in this section, a storage vessel that is assigned to an affected source subject to this subpart that is also subject to the 40 CFR part 60, subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984) is required to comply only with the provisions of this subpart. After the compliance dates specified in this section, that storage vessel shall no longer be subject to 40 CFR part 60, subpart Kb.

(j) After the compliance dates specified in this subpart, if any combustion device, recovery device or recapture device subject to this subpart is also subject to monitoring, recordkeeping, and reporting requirements for hazardous waste, disposal, and treatment facilities in 40 CFR part 264, subpart AA (Air Emission Standards for Process Vents) or subpart CC (Air Emission Standards for Tanks, Surface Impoundment, and Containers), the owner or operator may comply with either paragraph (j)(1) or (2) of this section. If, after the compliance dates specified in this subpart, any combustion device, recovery device, or recapture device subject to this subpart is subject to monitoring and recordkeeping requirements hazardous waste treatment, storage, and disposal facilities in 40 CFR part 265, subpart AA (Air Emission Standards for Process Vents) or subpart CC (Air Emission Standards for Tanks, Surface Impoundments, and Containers), the owner or operator may comply with either paragraph (j)(1) or (3) of this section. If the owner or operator elects to comply with either paragraph (j)(2) or (3) of this section, the owner or operator shall notify the Administrator of this choice in the Notification of Compliance Status required by § 63.1439(e)(5).

(1) The owner or operator shall comply with the monitoring, recordkeeping and reporting requirements of this subpart.

(2) The owner or operator shall comply with the monitoring, recordkeeping and reporting requirements in 40 CFR part 264, with the following exception. All excursions, as defined in § 63.1438(f), shall be reported in the periodic report. Compliance with this paragraph shall constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart.

(3) The owner or operator shall comply with the monitoring and recordkeeping requirements of 40 CFR part 265, subpart AA or subpart CC, and the periodic reporting requirements under 40 CFR part 264, subpart AA or subpart CC, that would apply to the device if the facility had final-permitted status, with the following exception. All excursions, as defined in § 63.1438(f), shall be reported in the periodic report. Compliance with this paragraph shall

constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart.

(k) Paragraphs (k)(1) and (2) of this section address instances in which requirements from other regulations overlap for the same heat exchange system(s) or waste management unit(s) that are subject to this subpart.

(1) After the applicable compliance date specified in this subpart, if a heat exchange system subject to this subpart is also subject to a standard identified in paragraph (k)(1)(i) or (ii) of this section, compliance with the applicable provisions of the standard identified in paragraph (k)(1)(i) or (ii) shall constitute compliance with the applicable provisions of this subpart with respect to that heat exchange system.

(i) 40 CFR part 63, subpart F.

(ii) A subpart of this part which requires compliance with the HON heat exchange system requirements in § 63.104 (e.g., 40 CFR part 63, subpart JJJ or U).

(2) After the applicable compliance date specified in this subpart, if any waste management unit subject to this subpart is also subject to a standard identified in paragraph (k)(2)(i) or (ii) of this section, compliance with the applicable provisions of the standard identified in paragraph (k)(2)(i) or (ii) shall constitute compliance with the applicable provisions of this subpart with respect to that waste management unit.

(i) 40 CFR part 63, subpart G.

(ii) A subpart of this part which requires compliance with the HON process wastewater provisions in §§ 63.132 through 63.147 (e.g., subpart JJJ or U).

(l) All terms in this subpart that define a period of time for completion of required tasks (e.g., monthly, quarterly, annual), unless specified otherwise in the section or subsection that imposes the requirement, refer to the standard calendar periods, unless altered by mutual agreement between the owner or operator and the Administrator in accordance with paragraph (l)(1) of this section.

(1) Notwithstanding time periods specified in this subpart for completion of required tasks, such time periods may be changed by mutual agreement

between the owner or operator and the Administrator, as specified in the General Provisions in 40 CFR part 63, subpart A (e.g., a period could begin on the compliance date or another date, rather than on the first day of the standard calendar period). For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(2) Where the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in paragraphs (1)(2)(i) or (ii) of this section, as appropriate.

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remains at least 2 weeks for tasks that shall be performed monthly, at least 1 month for tasks that shall be performed each quarter, or at least 3 months for tasks that shall be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(3) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during the specified period, provided that the task is conducted at a reasonable interval after completion of the task during the previous period.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26499, May 8, 2000; 79 FR 17377, Mar. 27, 2014]

§ 63.1423 Definitions.

(a) The following terms used in this subpart shall have the meaning given them in subparts A (§ 63.2), F (§ 63.101), G (§ 63.111), and H (§ 63.161) as specified after each term:

Act (subpart A)
Administrator (subpart A)
Automated monitoring and recording system (subpart G)
Boiler (subpart G)
Bottoms receiver (subpart H)
By-product (subpart F)

Car-seal (subpart G)
Closed-vent system (subpart G)
Combustion device (subpart G)
Commenced (subpart A)
Compliance date (subpart A)
Continuous monitoring system (subpart A)
Emission standard (subpart A)
EPA (subpart A)
Equipment (subpart H)
Flow indicator (subpart G)
Fuel gas (subpart F)
Fuel gas system (subpart F)
Hard-piping (subpart G)
Heat exchange system (subpart F)
Impurity (subpart F)
Incinerator (subpart G)
Major source (subpart A)
Malfunction (subpart A)
Oil-water separator or organic-water separator (subpart G)
Open-ended valve or line (subpart H)
Operating permit (subpart F)
Organic monitoring device (subpart G)
Owner or operator (subpart A)
Performance evaluation (subpart A)
Performance test (subpart A)
Permitting authority (subpart A)
Plant site (subpart F)
Potential to emit (subpart A)
Pressure release (subpart H)
Pressure relief device or valve (subpart H)
Primary fuel (subpart G)
Process heater (subpart G)
Process unit shutdown (subpart H)
Reactor (subpart G)
Recapture device (subpart G)
Research and development facility (subpart F)
Responsible official (subpart A)
Run (subpart A)
Secondary fuel (subpart G)
Sensor (subpart H)
Specific gravity monitoring device (subpart G)
State (subpart A)
Surge control vessel (subpart H)
Temperature monitoring device (subpart G)
Test method (subpart A)
Total resource effectiveness index value (subpart G)
Treatment process (subpart G)
Visible emission (subpart A)

(b) All other terms used in this subpart shall have the meaning given them in this section.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Annual average concentration, as used in conjunction with the wastewater

provisions, means the flow-weighted annual average concentration and is determined by the procedures in § 63.144(b), except as provided in § 63.1433(a)(2).

Annual average flow rate, as used in conjunction with the wastewater provisions, is determined by the procedures in § 63.144(c).

Batch cycle means the step or steps, from start to finish, that occur in a batch unit operation.

Batch unit operation means a unit operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of equipment after the batch cycle ceases and prior to beginning a new batch cycle. Mass, temperature, concentration and other properties of the process may vary with time. Addition of raw material and withdrawal of product do not simultaneously occur in a batch unit operation.

Catalyst extraction means the removal of the catalyst using either solvent or physical extraction method.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction also means the on-site fabrication, erection, or installation of a process unit or a combination of process units which subsequently becomes an affected source or part of an affected source due to a change in primary product.

Continuous record means documentation, either in hard copy or computer readable form, of data values measured at least once during approximately equal intervals of 15 minutes and recorded at the frequency specified in § 63.1439(d).

Continuous recorder is defined in § 63.111, except that when the definition in § 63.111 reads "or records 15-minute or more frequent block average values," the phrase "or records 1-hour or more frequent block average values" shall apply for purposes of this subpart.

Continuous unit operation means a unit operation where the inputs and outputs flow continuously. Continuous unit operations typically approach steady-state conditions. Continuous unit operations typically involve the simultaneous addition of raw material and withdrawal of the product.

Control technique means any equipment or process control used for capturing, recovering, or oxidizing organic hazardous air pollutant vapors. Such equipment includes, but is not limited to, absorbers, adsorbers, boilers, condensers, flares, incinerators, process heaters, and scrubbers, or any combination thereof. Process control includes extended cookout (as defined in this section). Condensers operating as reflux condensers that are necessary for processing, such as liquid level control, temperature control, or distillation operation, shall be considered inherently part of the process and will not be considered control techniques.

Emission point means an individual process vent, storage vessel, wastewater stream, or equipment leak.

Epoxide means a chemical compound consisting of a three-membered cyclic ether. Only emissions of epoxides listed in Table 4 of this subpart (i.e., ethylene oxide, propylene oxide, and epichlorohydrin) are regulated by the provisions of this subpart.

Equipment leak means emissions of organic HAP from a connector, pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, surge control vessel, bottoms receiver, or instrumentation system in organic HAP service.

Extended Cookout (ECO) means a control technique that reduces the amount of unreacted ethylene oxide (EO) and/or propylene oxide (PO) (epoxides) in the reactor. This is accomplished by allowing the product to react for a longer time period, thereby having less unreacted epoxides and reducing epoxides emissions that may have otherwise occurred.

Flexible operation unit means a process unit that manufactures different chemical products by periodically alternating raw materials fed to the process unit or operating conditions at the process unit. These units are also referred to as campaign plants or blocked operations.

Group 1 combination of batch process vents means a collection of process vents in a PMPU from batch unit operations that are associated with the use of a nonepoxide organic HAP to make

or modify the product that meet all of the following conditions:

(1) Has annual nonepoxide organic HAP emissions, determined in accordance with § 63.1428(b), of 11,800 kg/yr or greater, and

(2) Has a cutoff flow rate, determined in accordance with § 63.1428(e), that is greater than or equal to the annual average flow rate, determined in accordance with § 63.1428(d).

Group 2 combination of batch process vents means a collection of process vents in a PMPU from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify the product that is not classified as a Group 1 combination of batch process vents.

Group 1 continuous process vent means a process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product that meets all of the following conditions:

(1) Has a flow rate greater than or equal to 0.005 standard cubic meters per minute,

(2) Has a total organic HAP concentration greater than or equal to 50 parts per million by volume, and

(3) Has a total resource effectiveness index value, calculated in accordance with § 63.1428(h)(1), less than or equal to 1.0.

Group 2 continuous process vent means a process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product that is not classified as a Group 1 continuous process vent.

Group 1 storage vessel means a storage vessel that meets the applicability criteria specified in Table 3 of this subpart.

Group 2 storage vessel means a storage vessel that does not fall within the definition of a Group 1 storage vessel.

Group 1 wastewater stream means a process wastewater stream at an existing or new affected source that meets the criteria for Group 1 status in § 63.132(c), with the exceptions listed in § 63.1433(a)(2) for the purposes of this subpart (i.e., for organic HAP listed on Table 4 of this subpart only).

Group 2 wastewater stream means any process wastewater stream at an exist-

ing affected source or new affected source that does not meet the definition (in this section) of a Group 1 wastewater stream.

In organic hazardous air pollutant service or in organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP (as defined in this section), as determined according to the provisions of § 63.180(d). The provisions of § 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Initial start-up means the first time a new or reconstructed affected source begins production, or, for equipment added or changed as described in § 63.1420(g), the first time the equipment is put into operation to produce a polyether polyol. Initial start-up does not include operation solely for testing equipment. Initial start-up does not include subsequent start-ups of an affected source or portion thereof following malfunctions or shutdowns or following changes in product for flexible operation units. Further, for purposes of § 63.1422, initial start-up does not include subsequent start-ups of affected sources or portions thereof following malfunctions or process unit shutdowns.

Maintenance wastewater is defined in § 63.101, except that the term “polyether polyol manufacturing process unit” shall apply whenever the term “chemical manufacturing process unit” is used. Further, the generation of wastewater from the routine rinsing or washing of equipment in batch operation between batches is not maintenance wastewater, but is considered to be process wastewater, for the purposes of this subpart.

Make or modify the product means to produce the polyether polyol by polymerization of epoxides or other cyclic ethers with compounds having one or more reactive hydrogens, and to incorporate additives (e.g., preservatives, antioxidants, or diluents) in order to maintain the quality of the finished products before shipping. Making and modifying the product for this regulation does not include grafting, polymerizing the polyol, or reacting it with compounds other than EO or PO.

Maximum true vapor pressure is defined in § 63.111, except that the terms “transfer” and “transferred” shall not apply for the purposes of this subpart.

New process unit means a process unit for which the construction or reconstruction commenced after September 4, 1997.

On-site or on site means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, a location within the plant site where the affected source is located. On-site storage of records includes, but is not limited to, a location at the affected source or PMPU to which the records pertain or a location elsewhere at the plant site where the affected source is located.

Operating day refers to the 24-hour period defined by the owner or operator in the Notification of Compliance Status required by § 63.1439(e)(5). That 24-hour period may be from midnight to midnight or another 24-hour period. The operating day is the 24-hour period for which daily average monitoring values are determined.

Organic hazardous air pollutant(s) (organic HAP) means one or more of the chemicals listed in Table 4 of this subpart, or any other chemical which:

- (1) Is knowingly produced or introduced into the manufacturing process other than as an impurity; and
- (2) Is listed in Table 2 of 40 CFR part 63, subpart F in the HON.

Polyether polyol means a compound formed through the polymerization of EO or PO or other cyclic ethers with compounds having one or more reactive hydrogens (i.e., a hydrogen atom bonded to nitrogen, oxygen, phosphorus, sulfur, etc.) to form polyethers (i.e., compounds with two or more ether bonds). This definition of *polyether polyol* excludes cellulose ethers (such as methyl cellulose, carboxymethyl cellulose, hydroxyethyl cellulose, hydroxy ethyl cellulose, and hydroxypropyl methyl cellulose) and materials regulated under 40 CFR part 63, subparts F, G, and H (the HON), such as glycols and glycol ethers.

Polyether polyol manufacturing process unit (PMPU) means a process unit that manufactures a polyether polyol as its primary product, or a process unit des-

ignated as a polyether polyol manufacturing unit in accordance with § 63.1420(e)(2). A polyether polyol manufacturing process unit consists of more than one unit operation. This collection of equipment includes purification systems, reactors and their associated product separators and recovery devices, distillation units and their associated distillate receivers and recovery devices, other associated unit operations, storage vessels, surge control vessels, bottoms receivers, product transfer racks, connected ducts and piping, combustion, recovery, or recapture devices or systems, and the equipment (i.e., all pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are associated with the PMPU) that are subject to the equipment leak provisions as specified in § 63.1434.

Pressure decay curve is the graph of the reactor pressure versus time from the point when epoxide feed is stopped until the reactor pressure is constant, indicating that most of the epoxide has reacted out of the vapor and liquid phases. This curve shall be determined with no leaks or vents from the reactor.

Primary product is defined in and determined by the procedures specified in § 63.1420(e).

Process unit means a collection of equipment assembled and connected by pipes or ducts to process raw materials and to manufacture a product.

Process vent means a point of emission from a unit operation having a gaseous stream that is discharged to the atmosphere either directly or after passing through one or more combustion, recovery, or recapture devices. A process vent from a continuous unit operation is a gaseous emission stream containing more than 0.005 weight-percent total organic HAP. A process vent from a batch unit operation is a gaseous emission stream containing more than 225 kilograms per year (500 pounds per year) of organic HAP emissions. Unit operations that may have process vents are condensers, distillation units, reactors, or other unit operations within the PMPU. Process vents exclude

pressure relief device discharges, gaseous streams routed to a fuel gas system(s), and leaks from equipment regulated under § 63.1434. A gaseous emission stream is no longer considered to be a process vent after the stream has been controlled and monitored in accordance with the applicable provisions of this subpart.

Process wastewater means wastewater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. Examples are product tank drawdown or feed tank drawdown; water formed during a chemical reaction or used as a reactant; water used to wash impurities from organic products or reactants; equipment washes between batches in a batch process; water used to cool or quench organic vapor streams through direct contact; and condensed steam from jet ejector systems pulling vacuum on vessels containing organics.

Product means a compound or material which is manufactured by a process unit. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

Product class means a group of polyether polyols with a similar pressure decay curve (or faster pressure decay curves) that are manufactured within a given set of operating conditions representing the decline in pressure versus time. All products within a product class shall have an essentially similar pressure decay curve, and operate within a given set of operating conditions. These operating conditions are: a minimum reaction temperature; the number of -OH groups in the polyol; a minimum catalyst concentration; the type of catalyst (e.g., self-catalyzed, base catalyst, or acid catalyst); the epoxide ratio, or a range for that ratio; and the reaction conditions of the system (e.g., the size of the reactor, or the size of the batch).

Reactor liquid means the compound or material made in the reactor, even though the substance may be transferred to another vessel. This material may require further modifications before becoming a final product, in which

case the reactor liquid is classified as an “intermediate.” This material may be complete at this stage, in which case the reactor liquid is classified as a “product.”

Reconstruction means the replacement of components of an affected source or of a previously unaffected stationary source that becomes an affected source as a result of the replacement, to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the provisions of this subpart.

Recovery device means an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers (except reflux condensers), oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin film evaporation units. For the purposes of the monitoring, recordkeeping, or reporting requirements of this subpart, recapture devices are considered to be recovery devices.

Residual is defined in § 63.111, except that when the definition in § 63.111 uses the term “Table 9 compounds,” the term “organic HAP listed in Table 9 of subpart G” shall apply, for the purposes of this subpart.

Shutdown means the cessation of operation of an affected source, a PMPU within an affected source, a waste management unit or unit operation within an affected source, equipment required or used to comply with this subpart, or the emptying or degassing of a storage vessel. The purposes for a shutdown may include, but are not limited to, periodic maintenance, replacement of equipment, or equipment repairs. Shutdown does not include the normal periods between batch cycles. For continuous unit operations, shutdown includes transitional conditions due to

changes in product for flexible operation units. For batch unit operations, shutdown does not include transitional conditions due to changes in product for flexible operation units. For purposes of the wastewater provisions, shutdown does not include the routine rinsing or washing of equipment between batch cycles.

Start-up means the setting into operation of an affected source, a PMPU within the affected source, a waste management unit or unit operation within an affected source, equipment required or used to comply with this subpart, or a storage vessel after emptying and degassing. For all processes, start-up includes initial start-up and operation solely for testing equipment. Start-up does not include the recharging of batch unit operations. For continuous unit operations, start-up includes transitional conditions due to changes in product for flexible operation units. For batch unit operations, start-up does not include transitional conditions due to changes in product for flexible operation units.

Steady-state conditions means that all variables (temperatures, pressures, volumes, flow rates, etc.) in a process do not vary significantly with time; minor fluctuations about constant mean values may occur.

Storage vessel means a tank or other vessel that is used to store liquids that contain one or more organic HAP. Storage vessels do not include:

- (1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;
- (3) Vessels with capacities smaller than 38 cubic meters;
- (4) Vessels and equipment storing and/or handling material that contains no organic HAP, or organic HAP as impurities only;
- (5) Surge control vessels and bottoms receiver tanks;
- (6) Wastewater storage tanks; and
- (7) Storage vessels assigned to another process unit regulated under another subpart of part 63.

Total organic compounds (TOC) are those compounds, excluding methane and ethane, measured according to the

procedures of Method 18 or Method 25A of 40 CFR part 60, appendix A.

Unit operation means one or more pieces of process equipment used to make a single change to the physical or chemical characteristics of one or more process streams. Unit operations include, but are not limited to, reactors, distillation units, extraction columns, absorbers, decanters, condensers, and filtration equipment.

Vent stream, as used in reference to process vents, means the emissions from a process vent.

Waste management unit is defined in § 63.111, except that when the definition in § 63.111 uses the term “chemical manufacturing process unit,” the term “PMPU” shall apply for the purposes of this subpart.

Wastewater means water that:

- (1) Contains either
 - (i) An annual average concentration of organic HAP listed in Table 4 of this subpart of at least 5 parts per million by weight and has an annual average flow rate of 0.02 liter per minute or greater, or
 - (ii) An annual average concentration of organic HAP listed on Table 4 of this subpart of at least 10,000 parts per million by weight at any flow rate; and that
- (2) Is discarded from a PMPU that is part of an affected source. Wastewater is process wastewater or maintenance wastewater.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26499, May 8, 2000; 79 FR 17377, Mar. 27, 2014]

§ 63.1424 Emission standards.

(a) Except as provided under paragraph (b) of this section, the owner or operator of an existing or new affected source shall comply with the provisions in:

- (1) Sections 63.1425 through 63.1430 for process vents;
- (2) Section 63.1432 for storage vessels;
- (3) Section 63.1433 for wastewater;
- (4) Section 63.1434 for equipment leaks;
- (5) Section 63.1435 for heat exchangers;
- (6) Section 63.1437 for additional test methods and procedures;
- (7) Section 63.1438 for monitoring levels and excursions; and

(8) Section 63.1439 for general reporting and recordkeeping requirements.

(b) When emissions of different kinds (i.e., emissions from process vents subject to §§ 63.1425 through 63.1430, storage vessels subject to § 63.1432, process wastewater, and/or in-process equipment subject to § 63.149) are combined, and at least one of the emission streams would require control according to the applicable provision in the absence of combination with other emission streams, the owner or operator shall comply with the requirements of either paragraph (b)(1) or (2) of this section.

(1) Comply with the applicable requirements of this subpart for each kind of emission in the stream as specified in paragraphs (a)(1) through (5) of this section; or

(2) Comply with the most stringent set of requirements that applies to any individual emission stream that is included in the combined stream, where either that emission stream would be classified as requiring control in the absence of combination with other emission streams, or the owner chooses to consider that emission stream to require control for the purposes of this paragraph.

§ 63.1425 Process vent control requirements.

(a) *Applicability of process vent control requirements.* For each process vent at an affected source, the owner or operator shall comply with the provisions of this section. Owners and operators of all affected sources using epoxides in the production of polyether polyols are subject to the requirements of paragraph (b) of this section. Owners or operators are subject to the requirements of paragraph (c) of this section only if epoxides are used in the production of polyether polyols and nonepoxide organic HAP are used to make or modify the product. Similarly, owners or operators are subject to the requirements of paragraph (d) of this section only if epoxides are used in the production of polyether polyols and organic HAP are used in catalyst extraction. The owner or operator of an affected source where polyether polyol products are produced using tetrahydrofuran shall comply with paragraph (f) of this section.

(b) *Requirements for epoxide emissions.* The owner or operator of an affected source where polyether polyol products are produced using epoxides shall reduce epoxide emissions from process vents from batch unit operations and continuous unit operations within each PMPU in accordance with either paragraph (b)(1) or (2) of this section.

(1) For new affected sources, the owner or operator shall comply with paragraph (b)(1)(i), (ii), or (iii) this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(1)(i) and (ii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(1)(i) and (ii) of this section, each process vent not controlled in accordance with paragraph (b)(1)(ii) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(1)(i) of this section.

(i) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 99.9 percent;

(ii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture, or recovery device of 20 ppmv or less; or

(iii) Maintain an emission factor of no greater than 4.43×10^{-3} kilogram epoxide emissions per megagram of product (4.43×10^{-3} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(2) For existing affected sources, the owner or operator shall comply with either paragraph (b)(2)(i), (ii), (iii), or (iv) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(ii) and (iii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(2)(ii) and (iii) of this section, each process vent that is not controlled in accordance with paragraph (b)(2)(iii) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(2)(ii) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(i) and (iii) of this section.

(i) Reduce the total epoxide emissions from each process vent using a flare;

(ii) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent;

(iii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture or recovery devices of 20 ppmv or less; or

(iv) Maintain an emission factor of no greater than 1.69×10^{-2} kilogram epoxide emissions per megagram of product (1.69×10^{-2} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(c) *Requirements for nonepoxide organic HAP emissions from making or modifying the product.* The owner or operator of a new or existing source where polyether polyols are produced using epoxides, and where nonepoxide organic HAP are used to make or modify the product, shall comply with this paragraph. For each process vent from a continuous unit operation that is associated with the use of a nonepoxide organic HAP to make or modify the product, the owner or operator shall determine if the process vent is a Group 1 continuous process vent, as defined in § 63.1423. For the combination of process vents from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify the product, the owner or operator shall determine if the combination of process vents is a Group 1 combination of batch process vents, as defined in § 63.1423.

(1) *Requirements for Group 1 combinations of batch process vents.* For each Group 1 combination of batch process vents, as defined in § 63.1423, the owner or operator shall comply with either paragraph (c)(1)(i) or (ii) of this section.

(i) Reduce nonepoxide organic HAP emissions using a flare.

(ii) Reduce nonepoxide organic HAP emissions by 90 percent using a combustion, recovery, or recapture device.

(2) *Requirements for Group 2 combinations of batch process vents.* For each Group 2 combination of batch process vents, as defined in § 63.1423, the owner or operator reassess the group status when process changes occur, in accordance

with the provisions of § 63.1428(g). No control requirements apply to these process vents.

(3) *Requirements for Group 1 continuous process vents.* For each Group 1 continuous process vent, as defined in § 63.1423, the owner or operator shall comply with either paragraph (c)(3)(i) or (ii) of this section.

(i) Reduce nonepoxide organic HAP emissions using a flare.

(ii) Reduce nonepoxide organic HAP emissions by 98 percent using a combustion, recovery, or recapture device.

(4) *Requirements for Group 2 continuous process vents.* For each Group 2 continuous process vent, as defined in § 63.1423, the owner or operator shall comply with either paragraph (c)(4)(i) or (ii) of this section.

(i) If the TRE for the process vent is greater than 1.0 but less than 4.0, the owner or operator shall comply with the monitoring provisions in § 63.1429, the recordkeeping provisions in § 63.1430(d), and recalculate the TRE index value when process changes occur, in accordance with the provisions in § 63.1428(h)(2).

(ii) If the TRE for the process vent is greater than 4.0, the owner or operator shall recalculate the TRE index value when process changes occur, in accordance with the provisions in § 63.1428(h)(2).

(d) *Requirements for nonepoxide organic HAP emissions from catalyst extraction.* The owner or operator of a new or existing affected source where polyether polyol products are produced using epoxide compounds shall comply with either paragraph (d)(1) or (2) of this section. A PMPU that does not use any nonepoxide organic HAP in catalyst extraction is exempt from the requirements of this paragraph.

(1) Reduce emissions of nonepoxide organic HAP from all process vents associated with catalyst extraction using a flare; or

(2) Reduce emissions of nonepoxide organic HAP from the sum total of all process vents associated with catalyst extraction by an aggregated 90 percent for each PMPU.

(e) [Reserved]

(f) *Requirements for process vents at PMPUs that produce polyether polyol products using tetrahydrofuran.* For each

process vent in a PMPU that uses tetrahydrofuran (THF) to produce one or more polyether polyol products that is, or is part of, an affected source, the owner or operator shall comply with the HON process vent requirements in §§63.113 through 63.118, except as provided for in paragraphs (f)(1) through (10) of this section.

(1) When December 31, 1992 is referred to in the HON process vent requirements in §63.113, it shall be replaced with September 4, 1997, for the purposes of this subpart.

(2) When §63.151(f), alternative monitoring parameters, and §63.152(e), submission of an operating permit application, are referred to in §§63.114(c) and 63.117(e), §63.1439(f), alternative monitoring parameters, and §63.1439(e)(8), submission of an operating permit application, respectively, shall apply for the purposes of this subpart.

(3) When the Notification of Compliance Status requirements contained in §63.152(b) are referred to in §§63.114, 63.117, and 63.118, the Notification of Compliance Status requirements contained in §63.1439(e)(5) shall apply for the purposes of this subpart.

(4) When the Periodic Report requirements contained in §63.152(c) are referred to in §§63.117 and 63.118, the Periodic Report requirements contained in §63.1439(e)(6) shall apply for the purposes of this subpart.

(5) When the definition of excursion in §63.152(c)(2)(ii)(A) is referred to in §63.118(f)(2), the definition of excursion in §63.1438(f) shall apply for the purposes of this subpart.

(6) When §63.114(e) specifies that an owner or operator shall submit the information required in §63.152(b) in order to establish the parameter monitoring range, the owner or operator shall comply with the provisions of §63.1438 for establishing the parameter monitoring level and shall comply with §63.1439(e)(5)(ii) or §63.1439(e)(8) for the purposes of reporting information related to the establishment of the parameter monitoring level, for the purposes of this subpart. Further, the term “level” shall apply whenever the term “range” is used in §§63.114, 63.117, and 63.118.

(7) When reports of process changes are required under §63.118(g), (h), (i), or

(j), paragraphs (f)(7)(i) through (iv) of this section shall apply for the purposes of this subpart.

(i) For the purposes of this subpart, whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report. A description of the process change shall be included in this report.

(ii) Whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the flow rate is less than 0.005 standard cubic meters per minute. This report may be included in the next Periodic Report. A description of the process change shall be included in this report.

(iii) Whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent with a flow rate less than 0.005 standard cubic meter per minute (scmm) to become a Group 2 process vent with a flow rate of 0.005 scmm or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator, unless the organic HAP concentration is less than 50 ppmv. This report may be included in the next Periodic Report. A description of the process change shall be submitted with the report.

(iv) Whenever a process change, as defined in §63.115(e), is made that causes a Group 2 process vent with an organic HAP concentration less than 50 parts per million by volume (ppmv) to become a Group 2 process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180

days after the process change is made or the information regarding the process change is known to the owner or operator, unless the flow rate is less than 0.005 standard cubic meters per minute. This report may be included in the next Periodic Report. A description of the process change shall be submitted with this report.

(8) When § 63.118 refers to § 63.152(f), the recordkeeping requirements in § 63.1439(d) shall apply for the purposes of this subpart.

(9) When §§ 63.115 and 63.116 refer to Table 2 of 40 CFR part 63, subpart F, the owner or operator shall only consider organic HAP as defined in this subpart.

(10) When the provisions of § 63.116(c)(3) and (4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (f)(10)(i) and (ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

§ 63.1426 Process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reduction for a PMPU.

(a) *Use of a flare.* When a flare is used to comply with § 63.1425(b)(1)(i) (in combination with other control techniques), (b)(2)(i), (c)(1)(i), (c)(3)(i), or (d)(1), the owner or operator shall comply with § 63.1437(c), and is not required to demonstrate the control efficiency for the flare, if the owner or operator chooses to assume a 98 percent control efficiency for that flare, as allowed under paragraph (e)(2)(i) of this section. In order to use only a flare to comply with § 63.1425(b)(1)(i), or to use a flare and apply a control efficiency

greater than 98 percent, an owner or operator shall submit a request in accordance with § 63.6(g) in either the Precompliance Report described in § 63.1439(e)(4), or in a supplement to the precompliance report, as described in § 63.1439(e)(4)(vii).

(b) *Exceptions to performance tests.* An owner or operator is not required to conduct a performance test when a combustion, recovery, or recapture device specified in paragraphs (b)(1) through (6) of this section is used to comply with § 63.1425(b), (c), or (d).

(1) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(2) A boiler or process heater where the process vent stream is introduced with the primary fuel or is used as the primary fuel.

(3) A combustion, recovery, or recapture device for which a performance test was conducted within the preceding 5-year period, using the same Methods specified in this section and either no deliberate process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. The operating parameters reported under the previous performance test shall be sufficient to meet the parameter monitoring requirements in this subpart.

(4) A boiler or process heater burning hazardous waste for which the owner or operator:

(i) Has been issued a final hazardous waste permit under 40 CFR part 270 and complies with the requirements for hazardous waste burned in boilers and industrial furnaces in 40 CFR part 266, subpart H; or

(ii) Has certified compliance with the interim status requirements for hazardous waste burned in boilers and industrial furnaces in 40 CFR part 266, subpart H.

(5) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements for incinerators in 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements

for incinerators in 40 CFR part 265, subpart O.

(6) Combustion, recovery or recapture device (except for condensers) performance may be determined by using the design evaluation described in paragraph (f) of this section, provided that the combustion, recovery or recapture device receives less than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPUs, determined in accordance with paragraph (d) of this section. If a combustion, recovery or recapture device exempted from testing in accordance with this paragraph receives more than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPUs, the owner or operator shall comply with the performance test requirements in paragraph (c) of this section and shall submit the test report in the next Periodic Report.

(c) *Determination of organic HAP concentration and control efficiency.* Except as provided in paragraphs (a) and (b) of this section, an owner or operator using a combustion, recovery, or recapture device to comply with an epoxide or organic HAP percent reduction efficiency requirement in § 63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2); an epoxide concentration limitation in § 63.1425(b)(1)(ii) or (b)(2)(ii); or an annual epoxide emission limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv), shall conduct a performance test using the applicable procedures in paragraphs (c)(1) through (4) of this section. The organic HAP or epoxide concentration and percent reduction may be measured as total epoxide, total organic HAP, or as TOC minus methane and ethane according to the procedures specified. When conducting testing in accordance with this section, the owner or operator is only required to measure HAP of concern for the specific requirement for which compliance is being determined. For instance, to determine compliance with the epoxide emission requirement of § 63.1425(b), the owner or operator is only required to measure epoxide control efficiency or outlet concentration.

(1) *Sampling site location.* The sampling site location shall be determined

as specified in paragraphs (c)(1)(i) and (ii) of this section.

(i) For determination of compliance with a percent reduction of total epoxide requirement in § 63.1425(b)(1)(i), (b)(2)(ii), or a percent reduction of total organic HAP requirement in § 63.1425(c)(1)(ii), (c)(3)(ii), or (d)(2), sampling sites shall be located at the inlet of the combustion, recovery, or recapture device as specified in paragraphs (c)(1)(i)(A), (B), and (C) of this section, and at the outlet of the combustion, recovery, or recapture device.

(A) For process vents from continuous unit operations, the inlet sampling site shall be determined in accordance with either paragraph (c)(1)(i)(A)(1) or (2) of this section.

(1) To demonstrate compliance with either the provisions for epoxide emissions in § 63.1425(b) or the provisions for nonepoxide organic HAP emissions from catalyst extraction in § 63.1425(d), the inlet sampling site shall be located after the exit from the continuous unit operation but before any recovery devices, or

(2) To demonstrate compliance with the requirements for nonepoxide organic HAP emissions from the use of nonepoxide organic HAP in making or modifying the product in § 63.1425(c), the inlet sampling site shall be located after all control techniques to reduce epoxide emissions and after the final nonepoxide organic HAP recovery device.

(B) For process vents from batch unit operations, the inlet sampling site shall be determined in accordance with either paragraph (c)(1)(i)(B)(1) or (2) of this section.

(1) To demonstrate compliance with either the provisions for epoxide emissions in § 63.1425(b) or the provisions for nonepoxide organic HAP emissions from catalyst extraction in § 63.1425(d), the inlet sampling site shall be located after the exit from the batch unit operation but before any recovery device.

(2) To demonstrate compliance with the requirements for nonepoxide organic HAP emissions in making or modifying the product in § 63.1425(c), the inlet sampling site shall be located after all control techniques to reduce epoxide emissions but before any nonepoxide organic HAP recovery device.

(C) If a process vent stream is introduced with the combustion air or as a secondary fuel into a boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP or TOC (minus methane and ethane) concentrations in all process vent streams and primary and secondary fuels introduced into the boiler or process heater.

(ii) To determine compliance with a parts per million by volume total epoxide or TOC limit in § 63.1425(b)(1)(ii) or (b)(2)(iii), the sampling site shall be located at the outlet of the combustion, recovery, or recapture device.

(2) [Reserved]

(3) *Testing conditions and calculation of TOC or total organic HAP concentration.* (i) Testing conditions shall be as specified in paragraphs (c)(3)(i)(A) through (E) of this section, as appropriate.

(A) Testing of process vents from continuous unit operations shall be conducted at maximum representative operating conditions, as described in § 63.1437(a)(1). Each test shall consist of three 1-hour runs. Gas stream volumetric flow rates shall be measured at approximately equal intervals of about 15 minutes during each 1-hour run. The organic HAP concentration (of the HAP of concern) shall be determined from samples collected in an integrated sample over the duration of each 1-hour test run, or from grab samples collected simultaneously with the flow rate measurements (at approximately equal intervals of about 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate. For gas streams from continuous unit operations, the organic HAP concentration or control efficiency used to determine compliance shall be the average organic HAP concentration or control efficiency of the three test runs.

(B) Testing of process vents from batch unit operations shall be conducted at absolute worst-case conditions or hypothetical worst-case conditions, as defined in paragraphs (c)(3)(i)(B)(1) through (5) of this section.

Worst-case conditions are limited to the maximum production allowed in a State or Federal permit or regulation and the conditions specified in § 63.1437(a)(1). Gas stream volumetric flow rates shall be measured at 15-minute intervals, or at least once during the emission episode. The organic HAP or TOC concentration shall be determined from samples collected in an integrated sample over the duration of the test, or from grab samples collected simultaneously with the flow rate measurements (at approximately equal intervals of about 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate.

(1) Absolute worst-case conditions are defined by the criteria presented in paragraph (c)(3)(i)(B)(1)(i) or (ii) of this section if the maximum load is the most challenging condition for the control device. Otherwise, absolute worst-case conditions are defined by the conditions in paragraph (c)(3)(i)(B)(1)(iii) of this section.

(i) The period in which the inlet to the control device will contain at least 50 percent of the maximum HAP load (in lbs) capable of being vented to the control device over any 8-hour period. An emission profile as described in paragraph (c)(3)(i)(B)(3)(i) of this section shall be used to identify the 8-hour period that includes the maximum projected HAP load.

(ii) A period of time in which the inlet to the control device will contain the highest HAP mass loading rate capable of being vented to the control device. An emission profile as described in paragraph (c)(3)(i)(B)(3)(i) of this section shall be used to identify the period of maximum HAP loading.

(iii) The period of time when the HAP loading or stream composition (including non-HAP) is most challenging for the control device. These conditions include, but are not limited to the following: periods when the stream contains the highest combined VOC and HAP load described by the emission profiles in paragraph (c)(3)(i)(B)(3) of this section; periods when the streams contain HAP constituents that approach limits of solubility for scrubbing media; or periods when the

streams contain HAP constituents that approach limits of adsorptivity for carbon adsorption systems.

(2) Hypothetical worst-case conditions are simulated test conditions that, at a minimum, contain the highest hourly HAP load of emissions that would be predicted to be vented to the control device from the emissions profile described in paragraph (c)(3)(i)(B)(3)(ii) or (iii) of this section.

(3) The owner or operator shall develop an emission profile for the vent to the control device that describes the characteristics of the vent stream at the inlet to the control device under worst case conditions. The emission profile shall be developed based on any one of the procedures described in paragraphs (c)(3)(i)(B)(3) (i) through (iii) of

this section, as required by paragraph (c)(3)(i)(B) of this section.

(i) The emission profile shall consider all emission episodes that could contribute to the vent stack for a period of time that is sufficient to include all processes venting to the stack and shall consider production scheduling. The profile shall describe the HAP load to the device that equals the highest sum of emissions from the episodes that can vent to the control device in any given period, not to exceed 1 hour. Emissions per episode shall be divided by the duration of the episode only if the duration of the episode is longer than 1 hour, and emissions per episode shall be calculated using the procedures specified in Equation 1:

$$E = \sum_{i=1}^n P_i MW_i \times \frac{(V)(t)}{(R)(T)} \times \frac{P_T}{P_T - \sum_{j=1}^m (P_j)} \quad [\text{Equation 1}]$$

Where:

E = Mass of HAP emitted.

V = Purge flow rate at the temperature and pressure of the vessel vapor space.

R = Ideal gas law constant.

T = Temperature of the vessel vapor space (absolute).

P_i = Partial pressure of the individual HAP.

P_j = Partial pressure of individual condensable VOC compounds (including HAP).

P_T = Pressure of the vessel vapor space.

MW_i = Molecular weight of the individual HAP.

t = Time of purge.

n = Number of HAP compounds in the emission stream.

i = Identifier for a HAP compound.

j = Identifier for a condensable compound.

m = Number of condensable compounds (including HAP) in the emission stream.

(ii) The emission profile shall consist of emissions that meet or exceed the highest emissions that would be expected under actual processing conditions. The profile shall describe equipment configurations used to generate the emission events, volatility of materials processed in the equipment, and the rationale used to identify and characterize the emission events. The emissions may be based on using com-

pounds more volatile than compounds actually used in the process(es), and the emissions may be generated from all equipment in the process(es) or only selected equipment.

(iii) The emission profile shall consider the capture and control system limitations and the highest emissions that can be routed to the control device, based on maximum flow rate and concentrations possible because of limitations on conveyance and control equipment (e.g., fans, LEL alarms and safety bypasses).

(4) Three runs, each at a minimum of the complete duration of the batch venting episode or 1 hour, whichever is shorter, and a maximum of 8 hours, are required for performance testing. Each run shall occur over the same worst-case conditions, as defined in paragraph (c)(3)(i)(B) of this section.

(5) If a condenser is used to control the process vent stream(s), the worst case emission episode(s) shall represent a period of time in which a process vent from the batch cycle or combination of cycles (if more than one cycle is vented through the same process vent)

will require the maximum heat removal capacity, in Btu/hr, to cool the process vent stream to a temperature that, upon calculation of HAP concentration, will yield the required removal efficiency for the entire cycle. The calculation of maximum heat load shall be based on the emission profile described in paragraph (c)(3)(i)(B)(3) of this section that will allow calculation of sensible and latent heat loads.

(ii) The concentration of either TOC (minus methane or ethane) or total organic HAP (of the HAP of concern) shall be calculated according to paragraph (c)(3)(ii)(A) or (B) of this section.

(A) The TOC concentration (C_{TOC}) is the sum of the concentrations of the individual components and shall be computed for each run using Equation 2:

$$C_{\text{TOC}} = \sum_{i=1}^x \frac{\left(\sum_{j=1}^n C_{ji} \right)}{x} \quad [\text{Equation 2}]$$

Where:

C_{TOC} = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.

C_{ji} = Concentration of sample components j of sample i , dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

(B) The total organic HAP concentration (C_{HAP}) shall be computed according to Equation 2, except that only the organic HAP species shall be summed.

(iii) The concentration of TOC or total organic HAP shall be corrected to 3 percent oxygen if a combustion device is used.

(A) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR part 60, appendix A shall be used to determine the oxygen concentration ($\%O_{2d}$). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic HAP samples are taken.

(B) The concentration corrected to 3 percent oxygen shall be computed using Equation 3, as follows:

$$C_c = C_m \left(\frac{17.9}{20.9 - \%O_{2d}} \right) \quad [\text{Equation 3}]$$

Where:

C_c = Concentration of TOC or organic HAP corrected to 3 percent oxygen, dry basis, parts per million by volume.

C_m = Concentration of TOC (minus methane and ethane) or organic HAP, dry basis, parts per million by volume.

$\%O_{2d}$ = Concentration of oxygen, dry basis, percent by volume.

(4) *Test methods.* When testing is conducted to measure emissions from an affected source, the test methods specified in paragraphs (c)(4)(i) through (iv) of this section shall be used, as applicable.

(i) For sample and velocity traverses, Method 1 or 1A of appendix A of part 60 shall be used, as appropriate, except that references to particulate matter in Method 1A do not apply for the purposes of this subpart.

(ii) The velocity and gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(iii) The concentration measurements shall be determined using the methods described in paragraphs (c)(4)(iii) (A) through (C) of this section.

(A) Method 18 of appendix A of part 60 may be used to determine the HAP concentration in any control device efficiency determination.

(B) Method 25 of appendix A of part 60 may be used to determine total gaseous nonmethane organic concentration for control efficiency determinations in combustion devices.

(C) Method 25A of appendix A of part 60 may be used to determine the HAP or TOC concentration for control device efficiency determinations under the conditions specified in Method 25 of appendix A of part 60 for direct measurements of an effluent with a flame ionization detector, or in demonstrating compliance with the 20 ppmv standard, the instrument shall be calibrated on methane or the predominant HAP. If calibrating on the predominant HAP, the use of Method 25A of appendix A of part 60 shall comply with paragraphs (c)(4)(iii)(C) (I) through (3) of this section.

(1) The organic HAP used as the calibration gas for Method 25A of appendix A of part 60 shall be the single organic HAP representing the largest percent by volume.

(2) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(3) The span value of the analyzer shall be less than 100 ppmv.

(iv) Alternatively, any other method or data that have been validated according to the applicable procedures in 40 CFR part 63, appendix A, Method 301 may be used.

(5) *Calculation of percent reduction efficiency.* The following procedures shall be used to calculate percent reduction efficiency:

(i) Test duration shall be as specified in paragraphs (c)(3)(i) (A) through (B) of this section, as appropriate.

(ii) The mass rate of either TOC (minus methane and ethane) or total organic HAP of the HAP of concern (E_i , E_o) shall be computed.

(A) The following equations shall be used:

$$E_i = K_2 \left(\sum_{j=1}^n C_{ij} M_{ij} \right) Q_i \quad [\text{Equation 4}]$$

$$E_o = K_2 \left(\sum_{j=1}^n C_{oj} M_{oj} \right) Q_o$$

Where:

C_{ij} , C_{oj} = Concentration of sample component j of the gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry basis, parts per million by volume.

E_i , E_o = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry basis, kilogram per hour.

M_{ij} , M_{oj} = Molecular weight of sample component j of the gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, gram/gram-mole.

Q_i , Q_o = Flow rate of gas stream at the inlet and outlet of the combustion, recovery,

or recapture device, respectively, dry standard cubic meter per minute.

K_2 = Constant, 2.494×10^{-6} (parts per million) $^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

(B) Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, appendix A are summed using Equations 4 and 5 in paragraph (c)(5)(ii)(A) of this section.

(C) Where the mass rate of total organic HAP is being calculated, only the organic HAP species shall be summed using Equations 4 and 5 in paragraph (c)(5)(ii)(A) of this section.

(iii) The percent reduction in TOC (minus methane and ethane) or total organic HAP shall be calculated using Equation 6 as follows:

$$R = \frac{E_i - E_o}{E_i} (100) \quad [\text{Equation 6}]$$

Where:

R = Control efficiency of combustion, recovery, or recapture device, percent.

E_i = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the combustion, recovery, or recapture device as calculated under paragraph (c)(5)(ii) of this section, kilograms TOC per hour or kilograms organic HAP per hour.

E_o = Mass rate of TOC (minus methane and ethane) or total organic HAP at the outlet of the combustion, recovery, or recapture device, as calculated under paragraph (c)(5)(ii) of this section, kilograms TOC per hour or kilograms organic HAP per hour.

(iv) If the process vent stream entering a boiler or process heater with a design capacity less than 44 megawatts is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total organic HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total organic HAP in all combusted process vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total organic HAP, respectively, exiting the combustion device.

(d) *Determination of uncontrolled organic HAP emissions.* For each process

vent at a PMPU that is complying with the process vent control requirements in § 63.1425(b)(1)(i), (b)(1)(iii), (b)(2)(ii), (b)(2)(iv), (c)(1)(ii), or (d)(2) using a combustion, recovery, or recapture device, the owner or operator shall determine the uncontrolled organic HAP emissions in accordance with the provisions of this paragraph, with the exceptions noted in paragraph (d)(1) of this section. The provisions of § 63.1427(c)(1) shall be used to calculate uncontrolled epoxide emissions prior to the onset of an extended cook out.

(1) *Exemptions.* The owner or operator is not required to determine uncontrolled organic HAP emissions for process vents in a PMPU if the conditions in paragraph (d)(1)(i), (ii), or (iii) of this section are met.

(i) For PMPUs where all process vents subject to the epoxide emission reduction requirements of § 63.1425(b) are controlled at all times using a combustion, recovery, or recapture device, or extended cookout, the owner or operator is not required to determine uncontrolled epoxide emissions.

(ii) For PMPUs where the combination of process vents from batch unit operations associated with the use of nonepoxide organic HAP to make or modify the product is subject to the Group 1 requirements of § 63.1425(c)(1), the owner or operator is not required to determine uncontrolled nonepoxide organic HAP emissions for those process vents if every process vent from a batch unit operation associated with the use of nonepoxide organic HAP to make or modify the product in the PMPU is controlled at all times using a combustion, recovery, or recapture device.

(iii) For PMPUs where all process vents associated with catalyst extraction that are subject to the organic emission reduction requirements of § 63.1425(d)(2) are controlled at all times using a combustion, recovery, or recapture device, the owner or operator is not required to determine uncontrolled organic HAP emissions for those process vents.

(2) *Process vents from batch unit operations.* The uncontrolled organic HAP emissions from an individual batch cycle for each process vent from a

batch unit operation shall be determined using the procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U), § 63.488(b)(1) through (9). Uncontrolled emissions from process vents from batch unit operations shall be determined after the exit from the batch unit operation but before any recovery device.

(3) *Process vents from continuous unit operations.* The uncontrolled organic HAP emissions for each process vent from a continuous unit operation in a PMPU shall be determined at the location specified in paragraph (d)(3)(i) of this section, using the procedures in paragraph (d)(3)(ii) of this section.

(i) For process vents subject to either the provisions for epoxide emissions in § 63.1425(b) or the provisions for organic HAP emissions from catalyst extraction in § 63.1425(d), uncontrolled emissions shall be determined after the exit from the continuous unit operation but before any recovery device.

(ii) The owner or operator shall determine the hourly uncontrolled organic HAP emissions from each process vent from a continuous unit operation in accordance with paragraph (c)(5)(ii) of this section, except that the emission rate shall be determined at the location specified in paragraph (d)(3)(i) of this section.

(e) *Determination of organic HAP emission reduction for a PMPU.* (1) The owner or operator shall determine the organic HAP emission reduction for process vents in a PMPU that are complying with § 63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), or (d)(2) using Equation 7. The organic HAP emission reduction shall be determined for each group of process vents subject to the same paragraph (i.e., paragraph (b), (c), or (d)) of § 63.1425. For instance, process vents that emit epoxides are subject to paragraph (b) of § 63.1425. Therefore, if the owner or operator of an existing affected source is complying with the 98 percent reduction requirement in § 63.1425(b)(2)(ii), the organic HAP (i.e., epoxide) emission reduction shall be determined for the group of vents in a PMPU that are subject to this paragraph.

$$\text{RED}_{\text{PMPU}} = \left(\frac{\sum_{i=1}^n (E_{\text{unc}, i}) \left(\frac{R_i}{100} \right)}{\sum_{i=1}^n (E_{\text{unc}, i}) + \sum_{j=1}^m (E_{\text{unc}, j})} \right) * 100 \quad [\text{Equation 7}]$$

Where:

RED_{PMPU} = Organic HAP emission reduction for the group of process vents subject to the same paragraph of § 63.1425, percent.

$E_{\text{unc}, i}$ = Uncontrolled organic HAP emissions from process vent i that is controlled using a combustion, recovery, or recapture device, or extended cookout, kg/batch cycle for process vents from batch unit operations, kg/hr for process vents from continuous unit operations.

n = Number of process vents in the PMPU that are subject to the same paragraph of § 63.1425 and that are controlled using a combustion, recovery, or recapture device, or extended cookout.

R_i = Control efficiency of the combustion, recovery, or recapture device, or extended cookout, used to control organic HAP emissions from vent i , determined in accordance with paragraph (e)(2) of this section.

$E_{\text{unc}, j}$ = Uncontrolled organic HAP emissions from process vent j that is not controlled using a combustion, recovery, or recapture device, kg/batch cycle for process vents from batch unit operations, kg/hr for process vents from continuous unit operations.

m = Number of process vents in the PMPU that are subject to the same paragraph of § 63.1425 and that are not controlled using a combustion, recovery, or recapture device.

(2) The control efficiency, R_i , shall be assigned as specified below in paragraph (e)(2)(i), (ii), (iii), or (iv) of this section.

(i) If the process vent is controlled using a flare (and the owner or operator has not previously obtained approval to assume a control efficiency greater than 98 percent in accordance with § 63.6(g)) or a combustion device specified in paragraph (b)(1), (2), (4), or (5) of this section, and a performance test has not been conducted, the control efficiency shall be assumed to be 98 percent.

(ii) If the process vent is controlled using a combustion, recovery, or recapture device for which a performance test has been conducted in accordance

with the provisions of paragraph (c) of this section, or for which a performance test that meets the requirements of paragraph (b)(3) of this section has been previously performed, the control efficiency shall be the efficiency determined by the performance test.

(iii) If epoxide emissions from the process vent are controlled using extended cookout, the control efficiency shall be the efficiency determined in accordance with § 63.1427(e).

(iv) If the process vent is controlled using a flare, and the owner or operator has obtained approval to assume a control efficiency greater than 98 percent in accordance with § 63.6(g), the control efficiency shall be the efficiency approved in accordance with § 63.6(g).

(f) *Design evaluation.* A design evaluation is required for those control techniques that receive less than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPU, if the owner or operator has chosen not to conduct a performance test for those control techniques in accordance with paragraph (b)(6) of this section. The design evaluation shall include documentation demonstrating that the control technique being used achieves the required control efficiency under worst-case conditions, as determined from the emission profile described in § 63.1426(c)(3)(i)(B)(3)(i).

(1) Except for ECO whose design evaluation is presented in paragraph (f)(2) of this section, to demonstrate that a control technique meets the required control efficiency, a design evaluation shall address the composition and organic HAP concentration of the vent stream, immediately preceding the use of the control technique. A design evaluation shall also address other vent stream characteristics and control technique operating parameters, as specified in any one of paragraphs

(f)(1)(i) through (vi) of this section, depending on the type of control technique that is used. If the vent stream is not the only inlet to the control technique, the owner or operator shall also account for all other vapors, gases, and liquids, other than fuels, received into the control technique from one or more PMPUs, for purposes of the efficiency determination.

(i) For an enclosed combustion technique used to comply with the provisions of § 63.1425(b)(1), (c)(1), or (d), with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C, the design evaluation shall document that these conditions exist.

(ii) For a combustion control technique that does not satisfy the criteria in paragraph (f)(1)(i) of this section, the design evaluation shall document the control efficiency and address the characteristics listed in paragraphs (f)(1)(ii)(A) through (C) of this section, depending on the type of control technique.

(A) For a thermal vapor incinerator, in the design evaluation the owner or operator shall consider the autoignition temperature of the organic HAP, shall consider the vent stream flow rate, and shall establish the design minimum and average temperatures in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, in the design evaluation the owner or operator shall consider the vent stream flow rate and shall establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, in the design evaluation the owner or operator shall consider the vent stream flow rate; shall establish the design minimum and average flame zone temperatures and combustion zone residence time; and shall describe the method and location where the vent stream is introduced into the flame zone.

(iii) For a condenser, in the design evaluation the owner or operator shall consider the vent stream flow rate, relative humidity, and temperature, and shall establish the design outlet organic HAP compound concentration level, design average temperature of

the exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet. The temperature of the gas stream exiting the condenser shall be measured and used to establish the outlet organic HAP concentration.

(iv) For a carbon adsorption system that regenerates the carbon bed directly onsite as part of the control technique (such as a fixed-bed adsorber), in the design evaluation the owner or operator shall consider the vent stream flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for the carbon beds, design total regeneration stream mass or volumetric flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of the carbon. For vacuum desorption, the pressure drop shall also be included.

(v) For a carbon adsorption system that does not regenerate the carbon bed directly onsite as part of the control technique (such as a carbon canister), in the design evaluation the owner or operator shall consider the vent stream mass or volumetric flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control technique and source operating schedule.

(vi) For a scrubber, in the design evaluation the owner or operator shall consider the vent stream composition, constituent concentrations, liquid-to-vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall establish the design exhaust vent stream organic compound concentration level and shall include the additional information in paragraphs (f)(1)(vi) (A) and (B) of this

section for trays and a packed column scrubber.

(A) Type and total number of theoretical and actual trays.

(B) Type and total surface area of packing for entire column and for individual packed sections, if the column contains more than one packed section.

(2) For ECO, the design evaluation shall establish the minimum duration (time) of the ECO, the maximum pressure at the end of the ECO, or the maximum epoxide concentration in the reactor liquid at the end of the ECO for each product class.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26499, May 8, 2000]

§ 63.1427 Process vent requirements for processes using extended cookout as an epoxide emission reduction technique.

(a) *Applicability of extended cookout requirements.* Owners or operators of affected sources that produce polyether polyols using epoxides, and that are using ECO as a control technique to reduce epoxide emissions in order to comply with percent emission reduction requirements in § 63.1425(b)(1)(i) or (b)(2)(ii) shall comply with the provisions of this section. The owner or operator that is using ECO in order to comply with the emission factor requirements in § 63.1425(b)(1)(iii) or § 63.1425(b)(2)(iv) shall demonstrate that the specified emission factor is achieved by following the requirements in § 63.1431. If additional control devices are used to further reduce the HAP emissions from a process vent already controlled by ECO, then the owner or operator shall also comply with the testing, monitoring, recordkeeping, and reporting requirements associated with the additional control device, as specified in §§ 63.1426, 63.1429, and 63.1430, respectively.

(1) For each product class, the owner or operator shall determine the batch cycle percent epoxide emission reduction for the most difficult to control product in the product class, where the most difficult to control product is the polyether polyol that is manufactured with the slowest pressure decay curve.

(2) The owner or operator may determine the batch cycle percent epoxide

emission reduction by directly measuring the concentration of the unreacted epoxide, or by using process knowledge, reaction kinetics, and engineering knowledge, in accordance with paragraph (a)(2)(i) of this section.

(i) If the owner or operator elects to use any method other than direct measurement, the epoxide concentration shall be determined by direct measurement for one product from each product class and compared with the epoxide concentration determined using the selected estimation method, with the exception noted in paragraph (a)(2)(ii) of this section. If the difference between the directly determined epoxide concentration and the calculated epoxide concentration is less than 25 percent, then the selected estimation method will be considered to be an acceptable alternative to direct measurement for that class.

(ii) If uncontrolled epoxide emissions prior to the end of the ECO are less than 10 tons per year (9.1 megagrams per year), the owner or operator is not required to perform the direct measurement required in paragraph (a)(2)(i) of this section. Uncontrolled epoxide emissions prior to the end of the ECO shall be determined by the procedures in paragraph (d)(1) of this section.

(b) *Define the end of epoxide feed.* The owner or operator shall define the end of the epoxide feed in accordance with paragraph (b)(1) or (2) of this section.

(1) The owner or operator shall determine the concentration of epoxide in the reactor liquid at the point in time when all epoxide has been added to the reactor and prior to any venting. This concentration shall be determined in accordance with the procedures in paragraph (f)(1)(i) of this section.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the end of the epoxide feed may be defined by the reactor epoxide partial pressure at the point in time when all epoxide reactants have been added to the reactor. This reactor epoxide partial pressure shall be determined in accordance with the procedures in paragraph (g) of this section.

(i) No epoxide is emitted before the end of the ECO;

(ii) Extended cookout is the only control technique to reduce epoxide emissions; and

(iii) The owner or operator elects to determine the percent epoxide emission reduction for the ECO using reactor epoxide partial pressure in accordance with paragraph (e)(2) of this section.

(c) *Define the onset of the ECO.* The owner or operator shall calculate the uncontrolled emissions for the batch cycle by calculating the epoxide emis-

sions, if any, prior to the onset of the ECO, plus the epoxide emissions at the onset of the ECO. The onset of the ECO is defined as the point in time when the combined unreacted epoxide concentration in the reactor liquid is equal to 25 percent of the concentration of epoxides at the end of the epoxide feed, which was determined in accordance with paragraph (b) of this section.

(1) The uncontrolled epoxide emissions for the batch cycle shall be determined using Equation 8.

$$E_{e,u} = (C_{liq,i})(V_{liq,i})(D_{liq,i}) + (C_{vap,i})(V_{vap,i})(D_{vap,i}) + (E_{epox,bef}) \quad [\text{Equation 8}]$$

Where:

$E_{e,u}$ = Uncontrolled epoxide emissions at the onset of the ECO, kilograms per (kg/)batch.

$C_{liq,i}$ = Concentration of epoxide in the reactor liquid at the onset of the ECO, which is equal to 25 percent of the concentration of epoxide at the end of the epoxide feed, determined in accordance with paragraph (b)(1) of this section, weight percent.

$V_{liq,i}$ = Volume of reactor liquid at the onset of the ECO, liters.

$D_{liq,i}$ = Density of reactor liquid, kg/liter.

$C_{vap,i}$ = Concentration of epoxide in the reactor vapor space at the onset of the ECO, determined in accordance with paragraph (f)(2) of this section, weight percent.

$V_{vap,i}$ = Volume of the reactor vapor space at the onset of the ECO, liters.

$D_{vap,i}$ = Vapor density of reactor vapor space at the onset of the ECO, kg/liter.

$E_{epox,bef}$ = Epoxide emissions that occur prior to the onset of the ECO, determined in accordance with the provisions of § 63.1426(d), kilograms.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator may define the onset of the ECO as the point in time when the reactor epoxide partial pressure equals 25 percent of the reactor epoxide partial pressure at the end of the epoxide feed, and is not required to determine the uncontrolled epoxide emissions in accordance with paragraph (c)(1) of this section.

(d) *Determine emissions at the end of the ECO.* The owner or operator shall calculate the epoxide emissions at the end of the ECO, where the end of the ECO is defined as the point immediately before the time when the reactor contents are emptied and/or the reactor vapor space purged to the atmosphere or to a combustion, recovery, or recapture device.

(1) The epoxide emissions at the end of the ECO shall be determined using Equation 9.

$$E_{e,E} = (C_{liq,f})(V_{liq,f})(D_{liq,f}) + (C_{vap,f})(V_{vap,f})(D_{vap,f}) \quad [\text{Equation 9}]$$

Where:

$E_{e,E}$ = Epoxide emissions at the end of the ECO, kg.

$C_{liq,f}$ = Concentration of epoxide in the reactor liquid at the end of the ECO, determined in accordance with paragraph (f)(1) of this section, weight percent.

$V_{liq,f}$ = Volume of reactor liquid at the end of the ECO, liters.

$D_{liq,f}$ = Density of reactor liquid, kg/liter.

$C_{vap,f}$ = Concentration of epoxide in the reactor vapor space as it exits the reactor at the end of the ECO, determined in accordance with paragraph (f)(2) of this section, weight percent.

$V_{vap,f}$ = Volume of the reactor vapor space as it exits the reactor at the end of the ECO, liters.

$D_{vap,f}$ = Vapor density of reactor vapor space at the end of the ECO, kg/liter.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator may determine the reactor epoxide partial pressure at the end of the ECO instead of determining the uncontrolled epoxide emissions at the end of the ECO in ac-

cordance with paragraph (d)(1) of this section.

(e) *Determine percent epoxide emission reduction.* (1) The owner or operator shall determine the percent epoxide emission reduction for the batch cycle using Equation 10.

$$R_{\text{batchcycle}} = \left[\frac{E_{e,u} - (E_{e,E} \left(1 - \frac{R_{\text{addon},i}}{100}\right) - (E_{e,o} \left(1 - \frac{R_{\text{addon},j}}{100}\right))}{E_{e,u}} \right] * 100 \quad [\text{Equation 10}]$$

Where:

$R_{\text{batchcycle}}$ = Epoxide emission reduction for the batch cycle, percent.

$E_{e,E}$ = Epoxide emissions at the end of the ECO determined in accordance with paragraph (d)(1) of this section, kilograms.

$R_{\text{addon},i}$ = Control efficiency of combustion, recovery, or recapture device that is used to control epoxide emissions after the ECO, determined in accordance with the provisions of § 63.1426(c), percent.

$E_{e,o}$ = Epoxide emissions that occur before the end of the ECO, determined in accordance with the provisions of § 63.1426(d), kilograms.

$R_{\text{addon},j}$ = Control efficiency of combustion, recovery, or recapture device that is used

to control epoxide emissions that occur before the end of the ECO, determined in accordance with the provisions of § 63.1426(c), percent.

$E_{e,u}$ = Uncontrolled epoxide emissions determined in accordance with paragraph (c)(1) of this section, kilograms.

(2) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator may determine the percent epoxide emission reduction for the batch cycle using reactor epoxide partial pressure and Equation 11, instead of using the procedures in paragraph (e)(1) of this section.

$$R_{\text{batchcycle}} = \left[1 - \frac{P_{\text{epox},f}}{P_{\text{epox},i}} \right] * 100 \quad [\text{Equation 11}]$$

Where:

$R_{\text{batchcycle}}$ = Epoxide emission reduction for the batch cycle, percent.

$P_{\text{epox},i}$ = Reactor epoxide partial pressure at the onset of the ECO, determined in accordance with paragraph (c)(2) of this section, mm Hg.

$P_{\text{epox},f}$ = Reactor epoxide partial pressure at the end of the ECO, determined in accordance with paragraph (c)(2) of this section, mm Hg.

(f) *Determination of epoxide concentrations.* The owner or operator shall determine the epoxide concentrations in accordance with the procedures in this paragraph.

(1) The owner or operator shall determine the concentration of epoxide in

the reactor liquid using either direct measurement in accordance with paragraph (f)(1)(i) of this section, or reaction kinetics in accordance with paragraph (f)(1)(ii) of this section. An owner or operator may also request to use an alternative methodology in accordance with paragraph (f)(1)(iii) of this section.

(i) The owner or operator shall submit a standard operating procedure for obtaining the liquid sample, along with the test method used to determine the epoxide concentration. This information shall be submitted in the Precompliance Report.

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(ii) Determine the epoxide concentration in the reactor liquid using Equation 12. [Equation 12]

$$C_{\text{liq}, f} = C_{\text{liq}, i} e^{-kt} \quad [\text{Equation 12}]$$

$C_{\text{liq}, f}$ = Concentration of epoxide in the reactor liquid at the end of the time period, weight percent.

$C_{\text{liq}, i}$ = Concentration of epoxide in the reactor liquid at the beginning of the time period, weight percent.

k = Reaction rate constant, 1/hr.

t = Time, hours.

NOTE: This equation assumes a first order reaction with respect to epoxide concentration, where:

(iii) If the owner/operator deems that the methods listed in paragraphs (f)(1)(i) and (ii) of this section are not appropriate for the reaction system for a PMPU, then the owner/operator may submit a request for the use of an alternative method.

(2) The owner or operator shall determine the concentration of epoxide in the reactor vapor space using either direct measurement in accordance with paragraph (f)(2)(i) of this section, or by engineering estimation in accordance with paragraph (f)(2)(ii) of this section. An owner or operator may also request to use an alternative methodology in accordance with paragraph (f)(2)(iii) of this section.

(i) The owner or operator shall take two representative samples from a bleed valve off the reactor's process vent. The owner or operator shall determine the total epoxide concentra-

tion using 40 CFR part 60, appendix A, Method 18.

(ii) Determine the epoxide concentration in the vapor space using Raoult's Law or another appropriate phase equilibrium equation and the liquid epoxide concentration, determined in accordance with paragraph (f)(1) of this section.

(iii) If the owner/operator deems that the methods listed in paragraphs (f)(1)(i) and (ii) of this section are not appropriate for the reaction system for a PMPU, then the owner/operator may submit a request for the use of an alternative method.

(g) *Determination of pressure.* The owner or operator shall determine the total pressure of the system using standard pressure measurement devices calibrated according to the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(h) *Determination if pressure decay curves are similar.* The owner or operator shall determine the pressure decay curve as defined in § 63.1423. Products with similar pressure decay curves constitute a product class. To determine if two pressure decay curves are similar when the pressure decay curves for products have different starting and finishing pressures, the owner or operator shall determine the time when the pressure has fallen to half its total pressure by using Equation 13:

$$\text{Time } (P_{\text{half}} 1) - \text{Time } (P_{\text{half}} 2) < 20\% T_{\text{AVG}} \quad [\text{Equation 13}]$$

Where:

$P_{\text{half}1}$ = Half the total pressure of the epoxide for product 1.

Time ($P_{\text{half}1}$) = Time when the pressure has fallen to half its total pressure for product 1.

$P_{\text{half}2}$ = Half the total pressure of the epoxide for product 2.

Time ($P_{\text{half}2}$) = Time when the pressure has fallen to half its total pressure for product 2.

T_{AVG} = The average time to cookout to the point where the epoxide pressure is 25

percent of the epoxide pressure at the end of the feed step for products 1 and 2.

(i) *ECO monitoring requirements.* The owner or operator using ECO shall comply with the monitoring requirements of this paragraph to demonstrate continuous compliance with this subpart. Paragraphs (i)(1) through (3) of this section address monitoring of the extended cookout.

(1) To comply with the provisions of this section, the owner or operator shall monitor one of the parameters

listed in paragraphs (i)(1)(i) through (iii) of this section, or may utilize the provision in paragraph (i)(1)(iv) of this section.

(i) Time from the end of the epoxide feed;

(ii) The epoxide partial pressure in the closed reactor;

(iii) Direct measurement of epoxide concentration in the reactor liquid at the end of the ECO, when the reactor liquid is still in the reactor, or after the reactor liquid has been transferred to another vessel; or

(iv) An owner or operator may submit a request to the Administrator to monitor a parameter other than the parameters listed in paragraphs (i)(1)(i) through (iii) of this section, as described in § 63.1439(f).

(2) During the determination of the percent epoxide emission reduction in paragraphs (b) through (e) of this section, the owner or operator shall establish, as a level that shall be maintained during periods of operation, one of the parameters in paragraphs (i)(2)(i) through (iii) of this section, or may utilize the procedure in paragraph (i)(2)(iv) of this section, for each product class.

(i) The time from the end of the epoxide feed to the end of the ECO;

(ii) The reactor epoxide partial pressure at the end of the ECO;

(iii) The epoxide concentration in the reactor liquid at the end of the ECO, when the reactor liquid is still in the reactor, or after the reactor liquid has been transferred to another vessel; or

(iv) An owner or operator may submit a request to the Administrator to monitor a parameter other than the parameters listed in paragraphs (i)(2)(i) through (iii) of this section, as described in § 63.1439(f).

(3) For each batch cycle where ECO is used to reduce epoxide emissions, the owner or operator shall record the value of the monitored parameter at the end of the ECO. This parameter is then compared with the level established in accordance with paragraph (i)(2) of this section to determine if an excursion has occurred. An ECO excursion is defined as one of the situations described in paragraphs (i)(3)(i) through (v) of this section.

(i) When the time from the end of the epoxide feed to the end of the ECO is less than the time established in paragraph (i)(2)(i) of this section;

(ii) When the reactor epoxide partial pressure at the end of the ECO is greater than the partial pressure established in paragraph (i)(2)(ii) of this section;

(iii) When the epoxide concentration in the reactor liquid at the end of the ECO is greater than the epoxide concentration established in paragraph (i)(2)(iii) of this section;

(iv) When the parameter is not measured and recorded at the end of the ECO; or

(v) When the alternative monitoring parameter is outside the range established under § 63.1439(f) for proper operation of the ECO as a control technique.

(j) *Recordkeeping requirements.* (1) The owner or operator shall maintain the records specified in paragraphs (j)(1)(i) and (ii) of this section, for each product class. The owner or operator shall also maintain the records related to the initial determination of the percent epoxide emission reduction specified in paragraphs (j)(1)(iii) through (x) of this section, as applicable, for each product class.

(i) Operating conditions of the product class, including:

(A) Pressure decay curve;

(B) Minimum reaction temperature;

(C) Number of reactive hydrogens in the raw material;

(D) Minimum catalyst concentration;

(E) Ratio of EO/PO at the end of the epoxide feed; and

(F) Reaction conditions, including the size of the reactor or batch.

(ii) A listing of all products in the product class, along with the information specified in paragraphs (j)(1)(i)(A) through (F) of this section, for each product.

(iii) The concentration of epoxide at the end of the epoxide feed, determined in accordance with paragraph (b)(1) of this section.

(iv) The concentration of epoxide at the onset of the ECO, determined in accordance with paragraph (c) of this section.

(v) The uncontrolled epoxide emissions at the onset of the ECO, determined in accordance with paragraph

(c)(1) of this section. The records shall also include all the background data, measurements, and assumptions used to calculate the uncontrolled epoxide emissions.

(vi) The epoxide emissions at the end of the ECO, determined in accordance with paragraph (d)(1) of this section. The records shall also include all the background data, measurements, and assumptions used to calculate the epoxide emissions.

(vii) The percent epoxide reduction for the batch cycle, determined in accordance with paragraph (e)(1) of this section. The records shall also include all the background data, measurements, and assumptions used to calculate the percent reduction.

(viii) The parameter level, established in accordance with paragraph (i)(3) of this section.

(ix) If epoxide emissions occur before the end of the ECO, the owner or operator shall maintain records of the time and duration of all such emission episodes that occur during the initial demonstration of batch cycle efficiency.

(x) If the conditions in paragraphs (b)(2)(i), (ii), and (iii) of this section are met, the owner or operator is not required to maintain the records specified in paragraphs (j)(1)(iii) through (iv) of this section, but shall maintain the records specified in paragraphs (j)(1)(x)(A), (B), and (C) of this section.

(A) The reactor epoxide partial pressure at the following times:

(1) At end of the epoxide feed, determined in accordance with paragraph (b)(2) of this section;

(2) At the onset of the ECO, established in accordance with paragraph (c)(2) of this section; or

(3) At the end of the ECO, determined in accordance with paragraph (d)(2) of this section.

(B) The percent epoxide reduction for the batch cycle, determined in accordance with paragraph (e)(2) of this section. The records shall also include all the measurements and assumptions used to calculate the percent reduction.

(C) The reactor epoxide partial pressure at the end of the ECO.

(2) The owner or operator shall maintain the records specified in paragraphs (j)(2)(i) through (v) of this section.

(i) For each batch cycle, the product being produced and the product class to which it belongs.

(ii) For each batch cycle, the owner or operator shall record the value of the parameter monitored in accordance with paragraph (i)(3) of this section.

(iii) If a combustion, recovery, or recapture device is used to reduce emission in conjunction with ECO, the owner or operator shall record the information specified in § 63.1430(d) and comply with the monitoring provisions in § 63.1429.

(iv) [Reserved]

(v) If epoxide emissions occur before the end of the ECO, the owner or operator shall maintain records of the time and duration of all such emission episodes.

(k) *Reporting requirements.* The owner or operator shall comply with the reporting requirements in this paragraph.

(1) The information specified in paragraphs (k)(1)(i) through (ii) of this section shall be provided in the Precompliance Report, as specified in § 63.1439(e)(4).

(i) A standard operating procedure for obtaining the reactor liquid sample and a method that will be used to determine the epoxide concentration in the liquid, in accordance with paragraph (f)(1)(i) of this section.

(ii) A request to monitor a parameter other than those specified in paragraph (i)(1)(i), (ii), or (iii) of this section, as provided for in paragraph (i)(1)(iv) of this section.

(2) The information specified in paragraphs (k)(2)(i) through (iv) of this section shall be provided in the Notification of Compliance Status, as specified in § 63.1439(e)(5).

(i) For each product class, the information specified in paragraphs (k)(2)(i)(A) through (C) of this section.

(A) The operating conditions of this product class, as specified in paragraph (j)(1)(i) of this section.

(B) A list of all products in the product class.

(C) The percent epoxide emission reduction, determined in accordance with paragraph (e) of this section.

(ii) The parameter for each product class, as determined in accordance with paragraph (i)(2) of this section.

(iii) If a combustion, recovery, or re-capture device is used in addition to ECO to reduce emissions, the information specified in § 63.1430(g)(1).

(iv) If epoxide emissions occur before the end of the ECO, a listing of the time and duration of all such emission episodes that occur during the initial demonstration of batch cycle efficiency.

(3) The information specified in paragraphs (k)(3)(i) through (iii) of this section shall be provided in the Periodic Report, as specified in § 63.1439(e)(6).

(i) Reports of each batch cycle for which an ECO excursion occurred, as defined in paragraph (i)(3) of this section.

(ii) Notification of each batch cycle when the time and duration of epoxide emissions before the end of the ECO, recorded in accordance with paragraph (j)(2)(v) of this section, exceed the time and duration of the emission episodes during the initial epoxide emission percentage reduction determination, as recorded in paragraph (j)(1)(viii) of this section.

(iii) If a combustion, recovery, or re-capture device is used to reduce emissions, the information specified in § 63.1430(h).

(1) *New polyether polyol products.* If an owner or operator wishes to utilize ECO as a control option for a polyether polyol not previously assigned to a product class and reported to the Agency in accordance with either paragraph (k)(2)(i)(B), (l)(1)(ii), or (l)(2)(iii) of this section, the owner or operator shall comply with the provisions of paragraph (l)(1) or (2) of this section.

(1) If the operating conditions of the new polyether polyol are consistent with the operating conditions for an existing product class, the owner or operator shall comply with the requirements in paragraphs (l)(1)(i) and (ii) of this section.

(i) The owner or operator shall update the list of products for the product class required by paragraph (j)(1)(ii) of this section, and shall record the information in paragraphs (j)(1)(i)(A) through (F) of this section for the new product.

(ii) Within 180 days after the production of the new polyether polyol, the owner or operator shall submit a report updating the product list previously submitted for the product class. This information may be submitted along with the next Periodic Report.

(2) If the operating conditions of the new polyether polyol do not conform with the operating characteristics of an existing product class, the owner or operator shall establish a new product class and shall comply with provisions of paragraphs (l)(2)(i) through (iii) of this section.

(i) The owner or operator shall establish the batch cycle percent epoxide emission reduction in accordance with paragraphs (b) through (g) of this section for the product class.

(ii) The owner or operator shall establish the records specified in paragraph (j)(1) of this section for the product class.

(iii) Within 180 days of the production of the new polyether polyol, the owner or operator shall submit a report containing the information specified in paragraphs (k)(2)(i) and (ii) of this section.

(m) *Polyether polyol product changes.* If a change in operation, as defined in paragraph (m)(1) of this section, occurs for a polyether polyol that has been assigned to a product class and reported to the Agency in accordance with paragraph (k)(2)(i)(B), (l)(1)(ii), or (l)(2)(iii) of this section, the owner or operator shall comply with the provisions of paragraphs (m)(2) through (3) of this section.

(1) A change in operation for a polyether polyol is defined as a change in any one of the parameters listed in paragraphs (m)(1)(i) through (ix) of this section.

(i) A significant change in reaction kinetics;

(ii) Use of a different oxide reactant;

(iii) Use of a different EO/PO ratio;

(iv) A lower reaction temperature;

(v) A lower catalyst feed on a mole/mole fraction OH basis;

(vi) A shorter cookout;

(vii) A lower reactor pressure;

(viii) A different type of reaction, (e.g., a self-catalyzed vs. catalyzed reaction); or

(ix) A marked change in reaction conditions (e.g., a markedly different liquid level).

(2) If the operating conditions of the product after the change in operation remain within the operation conditions of the product class to which the product was assigned, the owner or operator shall update the records specified in paragraphs (j)(1)(i)(A) through (F) of this section for the product.

(3) If the operating conditions of the product after the change in operation are outside of the operating conditions of the product class to which the product was assigned, the owner or operator shall comply with the requirements in paragraph (m)(3)(i) or (ii) of this section, as appropriate.

(i) If the new operating conditions of the polyether polyol are consistent with the operating conditions for another existing product class, the owner or operator shall comply with the requirements in paragraphs (m)(3)(i)(A) and (B) of this section.

(A) The owner or operator shall update the list of products for the product class that the product is leaving, and for the product class that the product is entering, and shall record the new information in paragraphs (j)(1)(i)(A) through (F) of this section for the product.

(B) Within 180 days after the change in operating conditions for the polyether polyol product, the owner or operator shall submit a report updating the product lists previously submitted for the product class. This information may be submitted along with the next Periodic Report.

(ii) If the new operating conditions of the polyether polyol product do not conform with the operating characteristics of an existing product class, the owner or operator shall establish a new product class and shall comply with provisions of paragraphs (m)(3)(ii)(A) through (C) of this section.

(A) The owner or operator shall establish the batch cycle percent epoxide emission reduction in accordance with paragraphs (b) through (g) of this section for the product class.

(B) The owner or operator shall establish the records specified in paragraph (j)(1) of this section for the product class.

(C) Within 180 days of the change in operating conditions for the polyether polyol, the owner or operator shall submit a report containing the information specified in paragraphs (k)(2)(i) and (ii) of this section.

[64 FR 29439, June 1, 1999; 64 FR 31895, June 14, 1999, as amended at 65 FR 26500, May 8, 2000; 79 FR 17377, Mar. 27, 2014]

§ 63.1428 Process vent requirements for group determination of PMPUs using a nonepoxide organic HAP to make or modify the product.

(a) *Process vents from batch unit operations.* The owner or operator shall determine, for each PMPU located at an affected source, if the combination of all process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify the product is a Group 1 combination of batch process vents, as defined in § 63.1423. The annual uncontrolled nonepoxide organic HAP emissions, determined in accordance with paragraph (b) of this section, and annual average flow rate, determined in accordance with paragraph (c) of this section, shall be determined for all process vents from batch unit operations associated with the use of a nonepoxide organic HAP to make or modify the product, with the exception of those vents specified in paragraph (i) of this section, at the location after all applicable control techniques have been applied to reduce epoxide emissions in accordance with paragraph (a)(1) or (2) of this section.

(1) If the owner or operator is using a combustion, recovery, or recapture device to reduce epoxide emissions, this location shall be at the exit of the combustion, recovery, or recapture device.

(2) If the owner or operator is using ECO to reduce epoxide emissions, this location shall be at the exit from the batch unit operation. For the purpose of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column shall be considered part of the unit operation.

(b) *Determination of annual nonepoxide organic HAP emissions.* The owner or operator shall determine, for each PMPU, the total annual nonepoxide organic HAP emissions from the combination

of all process vents from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify the product in accordance with paragraphs (b)(1) and (2) of this section.

(1) The annual nonepoxide organic HAP emissions for each process vent from a batch unit operation associated with the use of a nonepoxide organic HAP to make or modify the product shall be determined using the batch process vent procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U), § 63.488(b).

(2) The owner or operator shall sum the annual nonepoxide organic HAP emissions from all individual process vents from batch unit operations in a PMPU, determined in accordance with paragraph (b)(1) of this section, to obtain the total nonepoxide organic HAP emissions from the combination of process vents associated with the use of a nonepoxide organic HAP to make or modify the product, for the PMPU.

(c) *Minimum emission level exemption.* If the annual emissions of TOC or nonepoxide organic HAP from the combination of process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify a polyether polyol for a PMPU are less than 11,800 kg/yr, the owner or operator of that PMPU is not required to comply with

the provisions in paragraphs (d) and (e) of this section.

(d) *Determination of average flow rate and annual average flow rate.* The owner or operator shall determine, for each PMPU, the total annual average flow rate for the combination of all process vents from batch unit operations that are associated with the use of a nonepoxide organic HAP to make or modify a product in accordance with paragraphs (d)(1) and (2) of this section.

(1) The annual average flow rate for each process vent from batch unit operations that is associated with the use of nonepoxide organic HAP to make or modify the product shall be determined using the batch process vent procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U), § 63.488(e).

(2) The owner or operator shall sum the annual average flow rates from the individual process vents from batch unit operations in a PMPU, determined in accordance with paragraph (d)(1) of this section, to obtain the total annual average flow rate for the combination of process vents associated with the use of a nonepoxide organic HAP to make or modify the product, for the PMPU.

(e) *Determination of cutoff flow rate.* For each PMPU at an affected source that uses nonepoxide organic HAP to make or modify the product, the owner or operator shall calculate the cutoff flow rate using Equation 14.

$$\text{CFR} = (0.00437)(\text{AE}) - 51.6 \quad [\text{Equation 14}]$$

Where:

CFR = Cutoff flow rate, standard cubic meters per minute (scmm).

AE = Annual TOC or nonepoxide organic HAP emissions from the combination of process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify the product, as determined in paragraph (b)(2) of this section, kg/yr.

(f) [Reserved]

(g) *Process changes affecting Group 2 combinations of process vents in a PMPU that are from batch unit operations.* Whenever process changes, as described

in paragraph (g)(1) of this section, are made that affect a Group 2 combination of batch process vents and that could reasonably be expected to change the group status from Group 2 to Group 1, the owner or operator shall comply with paragraphs (g)(2) and (3) of this section.

(1) Examples of process changes include, but are not limited to, increases in production capacity or production rate, changes in feedstock type or catalyst type; or whenever there is replacement, removal, or modification of recovery equipment considered part of

the batch unit operation. Any change that results in an increase in the annual nonepoxide organic HAP emissions from the estimate used in the previous group determination constitutes a process change for the purpose of these provisions. Process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the margin of variation on which the original group determination was based.

(2) For each process affected by a process change, the owner or operator shall redetermine the group status by repeating the procedures specified in paragraphs (b) through (e) of this section, as applicable, and determining if the combination of process vents is a Group 1 combination of batch process vents, as defined in § 63.1423. Alternatively, engineering assessment, as described in § 63.488(b)(6)(i), may be used to determine the effects of the process change.

(3) Based on the results of paragraph (g)(2) of this section, the owner or operator shall comply with either paragraph (g)(3)(i) or (ii) of this section.

(i) If the redetermination described in paragraph (g)(2) of this section indicates that the group status of the combination of process vents from batch unit operations in a PMPU that are associated with the use of nonepoxide organic HAP to make or modify the product changes from Group 2 to Group 1 as a result of the process change, the owner or operator shall submit a report as specified in § 63.1439(e)(6)(iii)(D)(1) and shall comply with Group 1 combination of batch process vents provisions in this subpart, as specified in § 63.1425(c)(1).

(ii) If the redetermination described in paragraph (g)(2) of this section indicates no change in group status, the owner or operator is not required to submit a report.

(h) *Process vents from continuous unit operations.* (1) The owner or operator shall determine the total resource effectiveness (TRE) index value for each process vent from a continuous unit operation that is associated with the use of nonepoxide organic HAP to make or modify the product. To determine the TRE index value, the owner

or operator shall conduct a TRE determination and calculate the TRE index value according to the HON process vent group determination procedures in § 63.115(d)(1) or (2) and the TRE equation in § 63.115(d)(3). The TRE index value shall be determined at the location after all applicable control techniques have been applied to reduce epoxide emissions in accordance with paragraph (h)(1)(i), (ii), or (iii) of this section.

(i) If the owner or operator uses one or more nonepoxide recovery devices after all control techniques to reduce epoxide emissions, this location shall be after the last nonepoxide recovery device.

(ii) If the owner or operator does not use a nonepoxide recovery device after a combustion, recovery, or recapture device to reduce epoxide emissions, this location shall be at the exit of the combustion, recovery, or recapture device.

(iii) If the owner or operator does not use a nonepoxide recovery device after extended cookout to reduce epoxide emissions, this location shall be at the exit from the continuous unit operation. For the purpose of these determinations, the primary condenser operating as a reflux condenser on a reactor or distillation column shall be considered part of the unit operation.

(2) The owner or operator of a Group 2 continuous process vent shall recalculate the TRE index value as necessary to determine whether the process vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the process vent to Group 1. Examples of process changes include, but are not limited to, increases in production capacity or production rate, changes in feedstock type or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph, process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE calculation was based.

(i) The TRE index value shall be recalculated based on measurements of process vent stream flow rate, TOC,

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and nonepoxide organic HAP concentrations, and heating values as specified in the HON process vent group determination procedures in § 63.115(a), (b), (c), and (d), as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 63.115(d)(1).

(ii) Where the recalculated TRE index value is less than or equal to 1.0, or, where the TRE index value before the process change was greater than 4.0 and the recalculated TRE index value is less than or equal to 4.0 but greater than 1.0, the owner or operator shall submit a report as specified in the process vent reporting and record-keeping provisions in § 63.1430(i) or (j), and shall comply with the appropriate provisions in the process vent control requirements in § 63.1425 by the dates specified in § 63.1422 (the section describing compliance dates for sources subject to this subpart).

(iii) Where the recalculated TRE index value is greater than 4.0, the owner or operator is not required to submit a report.

(i) *Combination of process vents from batch unit operations and process vents from continuous unit operations.* If an owner or operator combines a process vent from a batch unit operation that is associated with the use of a non-epoxide organic HAP to make or modify the product with a process vent from a continuous unit operation that is associated with the use of a non-epoxide prior to the epoxide control technique, or prior to a non-epoxide recovery device that is after the epoxide control technique, then the provisions in paragraphs (i)(1) and (2) of this section shall apply.

(1) The process vent from the batch unit operation is not required to be included in the group determination required by paragraphs (a) through (e) of this section.

(2) The TRE index value of the combined stream shall be determined in accordance with paragraph (h) of this section, and the TRE index value shall be calculated during a period when non-epoxide organic HAP emissions are

being generated by the batch unit operation.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000; 79 FR 17377, Mar. 27, 2014]

§ 63.1429 Process vent monitoring requirements.

(a) *Monitoring equipment requirements.*

The owner or operator of a process vent that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in § 63.1425(b)(1), (b)(2), (c)(1), (c)(3), or (d) shall install monitoring equipment specified in paragraph (a)(1), (2), (3), (4), (5), (6), or (7) of this section, depending on the type of device used. Also, the owner or operator that uses a recovery or recapture device to comply with § 63.1425(c)(4) shall install monitoring equipment as specified in paragraph (a)(4), (5), (6), or (7) of this section. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers' specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(1) Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(i) Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(ii) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(2) Where a flare is used, the following monitoring equipment is required: a device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame.

(3) Where a boiler or process heater of less than 44 megawatts design heat input capacity is used, the following monitoring equipment is required: a temperature monitoring device in the

firebox equipped with a continuous recorder. Any boiler or process heater in which all process vent streams are introduced with primary fuel or are used as the primary fuel is exempt from this requirement.

(4) Where an absorber is used, a scrubbing liquid flow rate meter or a pressure monitoring device is required and should be equipped with a continuous recorder. If an acid or base absorbent is used, a pH monitoring device to monitor scrubber effluent is also required. If two or more absorbers in series are used, a scrubbing liquid flow rate meter, or a pressure monitoring device, equipped with a continuous recorder, is required for each absorber in the series. An owner or operator may submit a request to instead install the scrubbing liquid flow rate meter, or a pressure monitoring device, equipped with a continuous recorder, on only the final absorber in a series, in accordance with the alternative parameter monitoring reporting requirements in § 63.1439(f).

(5) Where a condenser is used, a condenser exit temperature (product side) monitoring device equipped with a continuous recorder is required.

(6) Where a carbon adsorber is used, an integrating regeneration stream flow monitoring device having an accuracy of +10 percent or better, capable of recording the total regeneration stream mass or volumetric flow for each regeneration cycle, and a carbon bed temperature monitoring device, capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle are required.

(7) As an alternative to paragraphs (a)(4) through (6) of this section, the owner or operator may install an organic monitoring device equipped with a continuous recorder.

(b) *Alternative parameters.* An owner or operator of a process vent may request approval to monitor parameters other than those listed in paragraph (a) of this section. The request shall be submitted according to the procedures specified in the process vent reporting and recordkeeping requirements in § 63.1430(j) and the alternative parameter monitoring reporting require-

ments in § 63.1439(f). Approval shall be requested if the owner or operator:

(1) Uses a combustion device other than an incinerator, boiler, process heater, or flare; or

(2) For a Group 2 continuous process vent, maintains a TRE greater than 1.0 but less than or equal to 4.0 without a recovery device or with a recovery device other than the recovery devices listed in paragraph (a) of this section; or

(3) Uses one of the combustion, recovery, or recapture devices listed in paragraph (a) of this section, but seeks to monitor a parameter other than those specified in paragraph (a) of this section.

(c) *Monitoring of bypass lines.* The owner or operator of a process vent using a process vent system that contains bypass lines that could divert a process vent stream away from the combustion, recovery, or recapture device used to comply with the process vent control requirements in § 63.1425(b), (c), or (d) shall comply with paragraph (c)(1) or (2) of this section. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief devices needed for safety purposes are not subject to paragraphs (c)(1) or (2) of this section.

(1) Properly install, maintain, and operate a flow indicator that takes a reading at least once at approximately equal intervals of about 15 minutes. Records shall be generated as specified in the process vent reporting and recordkeeping provisions in § 63.1430(d)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert emissions away from the combustion, recovery, or recapture device and to the atmosphere; or

(2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and emissions are not diverted through the bypass line. Records shall be generated as specified in the process vent reporting and recordkeeping provisions in § 63.1430(d)(4)(i).

(d) *Establishment of parameter monitoring levels.* Parameter monitoring levels for process vents from continuous or batch unit operations using a combustion, recovery, or recapture device to comply with the process vent control requirements in § 63.1425(b), (c), or (d) shall be established as specified in paragraphs (d)(1) through (3) of this section.

(1) For each parameter monitored under paragraphs (a) or (b) of this section, the owner or operator shall establish a level, defined as either a maximum or minimum operating parameter as denoted in Table 7 of this subpart (the table listing the operating parameters for which monitoring levels are required to be established for process vent streams), that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart. The level shall be established in accordance with the procedures specified in § 63.1438(a) through (d), as applicable. The level may be based upon a prior performance test conducted for determining compliance with a regulation promulgated by the EPA, and the owner or operator is not required to conduct a performance test under the process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reductions in § 63.1426, provided that the prior performance test meets the conditions of § 63.1426(b)(3).

(2) The established level, along with supporting documentation, shall be submitted in the Notification of Compliance Status or the operating permit application as required in the Notification of Compliance Status requirements in § 63.1439(e)(5) or in the operating permit application requirements in § 63.1439(e)(8), respectively.

(3) The operating day shall be defined as part of establishing the parameter monitoring level and shall be submitted with the information in paragraph (d)(2) of this section. The definition of operating day shall specify the time(s) at which an operating day begins and ends.

[64 FR 29439, June 1, 1999, as amended at 79 FR 17377, Mar. 27, 2014]

§ 63.1430 Process vent reporting and recordkeeping requirements.

(a) [Reserved]

(b) *Records to demonstrate compliance.*

The owner or operator complying with the process vent control requirements in § 63.1425(b), (c), or (d) shall keep the following records, as applicable, readily accessible:

(1) When using a flare to comply with the process vent control requirements in § 63.1425(b)(2)(i), (c)(1)(i), (c)(3)(i), or (d)(1):

(i) The flare design (i.e., steam-assisted, air-assisted, or non-assisted);

(ii) All visible emission readings, heat content determinations, flow rate determinations, and exit velocity determinations made during the flare specification determination required by § 63.1437(c); and

(iii) All periods during the flare specification determination required by § 63.1437(c) when all pilot flames are absent.

(2) The following information when using a combustion, recovery, or recapture device (other than a flare) to achieve compliance with the process vent control requirements in § 63.1425(b), (c), or (d):

(i) For a combustion, recovery, or recapture device being used to comply with a percent reduction requirement of § 63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2), or the annual epoxide emission limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv), the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in the process vent requirements in § 63.1426;

(ii) For a combustion device being used to comply with an outlet concentration limitation of § 63.1425(b)(1)(ii) or (b)(2)(iii), the concentration of organic HAP or TOC outlet of the combustion device, as determined using the procedures specified in the process vent requirements in § 63.1426;

(iii) For a boiler or process heater, a description of the location at which the process vent stream is introduced into the boiler or process heater;

(iv) For a boiler or process heater with a design heat input capacity of less than 44 megawatts and where the process vent stream is introduced with

combustion air or is used as a secondary fuel and is not mixed with the primary fuel, the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in § 63.1426.

(c) *Records related to the establishment of parameter monitoring levels.* For each parameter monitored according to the process vent monitoring requirements in § 63.1429(a) and Table 5 of this subpart, or for alternate parameters and/or parameters for alternate control techniques monitored according to the alternative parameter monitoring reporting requirements in § 63.1439(f) as allowed under § 63.1429(b), maintain documentation showing the establishment of the level that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart, as required by the process vent monitoring requirements in § 63.1429(d).

(d) *Records to demonstrate continuous compliance.* The owner or operator that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in § 63.1425(b), (c), or (d) shall keep the following records readily accessible:

(1) Continuous records of the equipment operating parameters specified to be monitored under the process vent monitoring requirements in § 63.1429(a) as applicable, and listed in Table 5 of this subpart, or specified by the Administrator in accordance with the alternative parameter monitoring reporting requirements in § 63.1439(f), as allowed under § 63.1429(b). These records shall be kept as specified under § 63.1439(d), except as specified in paragraphs (d)(1)(i) and (ii) of this section.

(i) For flares, the records specified in Table 5 of this subpart shall be maintained in place of continuous records.

(ii) For carbon adsorbers used for process vents from batch unit operations, the records specified in Table 5 of this subpart shall be maintained in place of daily averages.

(2) Records of the daily average value for process vents from continuous unit operations or batch unit operations of each continuously monitored parameter, except as provided in paragraphs (d)(2)(i) and (ii) of this section.

(i) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in computing the daily averages. In addition, monitoring data recorded during periods of non-operation of the process (or specific portion thereof) resulting in cessation of organic HAP emissions shall not be included in computing the daily averages.

(ii) If all recorded values for a monitored parameter during an operating day are above the minimum or below the maximum parameter monitoring level established in accordance with the process vent monitoring requirements in § 63.1429(d), the owner or operator may record that all values were above the minimum or below the maximum level established, rather than calculating and recording a daily average for that operating day.

(3) Hourly records of whether the flow indicator for bypass lines specified under § 63.1429(c)(1) was operating and whether a diversion was detected at any time during the hour. Also, records of the time(s) of all periods when the process vent was diverted from the combustion, recovery, or recapture device, or the flow indicator specified in § 63.1429(c)(1) was not operating.

(4) Where a seal or closure mechanism is used to comply with the process vent monitoring requirements for bypass lines in § 63.1429(c)(2), hourly records of flow are not required. For compliance with § 63.1429(c)(2), the owner or operator shall record whether the monthly visual inspection of the seals or closure mechanism has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has been broken.

(5) Records specifying the times and duration of periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high level adjustments. In addition, records specifying any other periods of process or combustion, recovery, or recapture device operation when monitors are not operating.

(e) *Records related to the group determination for process vents that are associated with the use of nonepoxide organic HAP to make or modify the product—(1) Process vents from batch unit operations.* Except as provided in paragraphs (e)(1)(vi) and (vii) of this section, the owner or operator of an affected source shall maintain the records specified in paragraphs (e)(1)(i) through (v) of this section for each PMPU that uses a nonepoxide organic HAP to make or modify the product in batch unit operations. The records required to be maintained by this paragraph are limited to the information developed and used to make the group determination under the process vent requirements for processes using a nonepoxide organic HAP to make or modify the product in § 63.1428(a) through (e), as appropriate. If an owner or operator did not need to develop certain information (e.g., annual average flow rate) to determine the group status, the owner or operator is not required to develop additional information. The owner or operator may elect Group 1 status for process vents without making a Group 1/Group 2 determination. In such event, none of the records specified in paragraphs (e)(1)(i) through (v) are required.

(i) A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle for each unique product class made in the PMPU.

(ii) Total annual uncontrolled TOC or nonepoxide organic HAP emissions from the combination of process vents from batch unit operations associated with the use of nonepoxide organic HAP to make or modify the product, as determined in accordance with the process vent requirements for group determinations in § 63.1428(b).

(iii) The annual average flow rate for the combination of process vents from batch unit operations associated with the use of organic HAP to make or modify the product, as determined in accordance with the process vent requirements for group determinations in § 63.1428(d).

(iv) The cutoff flow rate, determined in accordance with the process vent re-

quirements for group determinations in § 63.1428(e).

(v) The results of the PMPU group determination (i.e., whether the combination of process vents is Group 1 or Group 2).

(vi) If the combination of all process vents from batch unit operations associated with the use of an organic HAP to make or modify the product is subject to the Group 1 batch process vent control requirements for nonepoxide HAP emissions from making or modifying the product in § 63.1425(c)(1), none of the records in paragraphs (e)(1)(i) through (v) of this section are required.

(vii) If the total annual emissions from the combination of process vents from batch unit operations associated with the use of an organic HAP to make or modify the product are less than 11,800 kg per year, only the records in paragraphs (e)(1)(i) and (ii) of this section are required.

(2) *Process vents from continuous unit operations.* The owner or operator of an affected source that uses nonepoxide organic HAP to make or modify the product in continuous unit operations shall keep records regarding the measurements and calculations performed to determine the TRE index value of each process vent stream. The owner or operator of Group 1 continuous process vents that are subject to the control requirements of § 63.1425(c)(3) is not required to keep these records.

(f) *Records for Group 2 process vents that are associated with the use of nonepoxide organic HAP to make or modify the product.* The following records shall be maintained for PMPUs with a Group 2 combination of batch process vents and/or one or more Group 2 continuous process vents.

(1) *Process vents from batch unit operations—emission records.* The owner or operator shall maintain records of the combined total annual nonepoxide organic HAP emissions from process vents associated with the use of nonepoxide organic HAP to make or modify the product for each PMPU where the combination of these process vents is classified as Group 2.

(2) *Process vents from continuous unit operations—monitoring records for vents with TRE between 1.0 and 4.0.* The owner

or operator using a recovery device or other means to achieve and maintain a TRE index value greater than 1.0 but less than 4.0 as specified in the HON process vent requirements in § 63.113(a)(3) or § 63.113(d) shall keep the following records readily accessible:

(i) Continuous records of the equipment operating parameters specified to be monitored under § 63.114(b) and listed in Table 5 of this subpart or specified by the Administrator in accordance with § 63.114(c) and § 63.117(e); and

(ii) Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in § 63.152(f). If carbon adsorber regeneration stream flow and carbon bed regeneration temperature are monitored, the records specified in Table 5 of this subpart shall be kept instead of the daily averages.

(3) *Process vents from continuous unit operations—records related to process changes.* The owner or operator subject to the provisions of this subpart who has elected to demonstrate compliance with the TRE index value greater than 4.0 under § 63.113(e) or greater than 1.0 under § 63.113(a)(3) or § 63.113(d) shall keep readily accessible records of:

(i) Any process changes as defined in § 63.115(e); and

(ii) Any recalculation of the TRE index value pursuant to § 63.115(e).

(4) *Process vents from continuous unit operations—records for vents with a flow rate less than 0.005 standard cubic meter per minute.* The owner or operator who elects to comply by maintaining a flow rate less than 0.005 standard cubic meter per minute under § 63.113(f), shall keep readily accessible records of:

(i) Any process changes as defined in § 63.115(e) that increase the process vent stream flow rate;

(ii) Any recalculation or measurement of the flow rate pursuant to § 63.115(e); and

(iii) If the flow rate increases to 0.005 standard cubic meter per minute or greater as a result of the process change, the TRE determination performed according to the procedures of § 63.115(d).

(5) *Process vents from continuous unit operations—records for vents with an organic HAP concentration less than 50*

parts per million. The owner or operator who elects to comply by maintaining an organic HAP concentration less than 50 parts per million by volume organic HAP concentration under § 63.113(g) shall keep readily accessible records of:

(i) Any process changes as defined in § 63.115(e) that increase the organic HAP concentration of the process vent stream;

(ii) Any recalculation or measurement of the concentration pursuant to § 63.115(e); and

(iii) If the organic HAP concentration increases to 50 parts per million by volume or greater as a result of the process change, the TRE determination performed according to the procedures of § 63.115(d).

(g) *Notification of Compliance Status.* The owner or operator of an affected source shall submit the information specified in paragraphs (g)(1) through (3) of this section, as appropriate, as part of the Notification of Compliance Status specified in § 63.1439(e)(5).

(1) For the owner or operator complying with the process vent control requirements in § 63.1425(b), (c)(1), (c)(3), or (d), the information specified in paragraph (b) of this section related to the compliance demonstration, and the information specified in paragraph (c) of this section related to the establishment of parameter monitoring levels,

(2) For each PMPU where the combination of process vents from batch unit operations that are associated with the use of nonepoxide organic HAP to make or modify the product is Group 2, the information related to the group determination specified in paragraph (e)(1) of this section.

(3) For each process vent from a continuous unit operation that is associated with the use of nonepoxide organic HAP to make or modify the product that is Group 2, the information related to the group determination specified in paragraph (e)(2) of this section.

(h) *Periodic Reports.* The owner or operator of an affected source shall submit Periodic Reports of the recorded information specified in paragraphs (h)(1) through (6) of this section, as appropriate, according to the schedule for submitting Periodic Reports in § 63.1439(e)(6)(i).

(1) Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under paragraph (d)(2) of this section were above the maximum, or below the minimum, level established in the Notification of Compliance Status or operating permit.

(2) Reports of the duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data as defined in § 63.1438(f)(1)(iv), (f)(2)(i)(B), or (f)(3)(ii).

(3) Reports of the times and durations of all periods recorded under paragraph (d)(3) of this section when the process vent stream is diverted from the combustion, recovery, or recapture device through a bypass line.

(4) Reports of all periods recorded under paragraph (d)(4) of this section in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

(5) Reports of the times and durations of all periods recorded under paragraph (d)(1)(i) of this section in which all pilot flames of a flare were absent.

(6) Reports of all carbon bed regeneration cycles during which the parameters recorded under paragraph (d)(1)(ii) of this section were above the maximum, or below the minimum, levels established in the Notification of Compliance Status or operating permit.

(i) *Reports of process changes.* Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 combination of batch process vents at a PMPU that are associated with the use of nonepoxide organic HAP to make or modify the product to become Group 1, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report or in a separate submittal to the Administrator, as specified in § 63.1439(e)(6)(iii)(D)(1). A description of the process change shall be submitted with the report.

(j) *Reporting requirements for Group 2 continuous process vents.* (1) Whenever a process change, as defined in

§ 63.1420(g)(3), is made that causes a Group 2 continuous process vent with a TRE greater than 4.0 to become a Group 2 continuous process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 calendar days after the process change is made or the information regarding the process change is known, unless the flow rate is less than 0.005 standard cubic meters per minute. The report may be submitted as part of the next periodic report. The report shall include:

(i) A description of the process change;

(ii) The results of the recalculation of the TRE index value required under § 63.1428(h)(2), and recorded under paragraph (f)(3) of this section; and

(iii) A statement that the owner or operator will comply with the process vent monitoring requirements specified in § 63.1429, as appropriate.

(2) Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 continuous process vent with a flow rate less than 0.005 standard cubic meters per minute to become a Group 2 continuous process vent with a flow rate of 0.005 standard cubic meters per minute or greater, the owner or operator shall submit a report within 180 calendar days after the process change is made or the information regarding the process change is known, unless the organic HAP concentration is less than 50 ppmv. The report may be submitted as part of the next periodic report. The report shall include:

(i) A description of the process change;

(ii) The results of the calculation of the TRE index value required under § 63.1428(h)(2), and recorded under paragraph (f)(3) of this section; and

(iii) A statement that the owner or operator will comply with the process vent monitoring requirements specified in § 63.1429, as appropriate.

(3) Whenever a process change, as defined in § 63.1420(g)(3), is made that causes a Group 2 continuous process vent with an organic HAP concentration less than 50 ppmv to become a Group 2 continuous process vent with an organic HAP concentration of 50 ppmv or greater and a TRE index value less than 4.0, the owner or operator

shall submit a report within 180 calendar days after the process change is made or the information regarding the process change is known, unless the flow rate is less than 0.005 standard cubic meters per minute. The report may be submitted as part of the next periodic report. The report shall include:

(i) A description of the process change;

(ii) The results of the calculation of the TRE index value required under § 63.1428(h)(2), and recorded under paragraph (f)(3) of this section; and

(iii) A statement that the owner or operator will comply with the process vent monitoring requirements specified in § 63.1429, as appropriate.

(k) *Alternative requests.* If an owner or operator uses a combustion, recovery, or recapture device other than those specified in the process vent monitoring requirements in § 63.1429(a)(1) through (7) and listed in Table 5 of this subpart; requests approval to monitor a parameter other than those specified in § 63.1429(a)(1) through (7) and listed in Table 5 of this subpart; or uses ECO and requests to monitor a parameter other than those listed in § 63.1427(i)(1)(i) through (iii), as allowed under § 63.1427(i)(1)(iv), the owner or operator shall submit a description of planned reporting and recordkeeping procedures, as specified in § 63.1439(f)(3), as part of the Precompliance Report as required under § 63.1439(e)(4), or to the Administrator as a separate submittal. The Administrator will specify appropriate reporting and recordkeeping requirements as part of the review of the Precompliance Report.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000; 79 FR 17378, Mar. 27, 2014]

§ 63.1431 Process vent annual epoxides emission factor plan requirements.

(a) *Applicability of emission factor plan requirements.* An owner or operator electing to comply with an annual epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv) shall develop and implement an epoxides emission factor plan in accordance with the provisions of this section.

(b) *Emission factor plan requirements.* The owner or operator shall develop an epoxides emission factor plan.

(1) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of a combustion, recovery, or recapture device (without extended cookout), the owner or operator shall develop and implement the plan in accordance with paragraph (c) of this section.

(2) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of extended cookout (without a combustion, recovery, or recapture device), the owner or operator shall develop and implement the plan in accordance with paragraph (d) of this section.

(3) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of extended cookout in conjunction with a combustion, recovery, or recapture device, the owner or operator shall develop and implement the plan in accordance with paragraph (e) of this section.

(c) *Compliance with epoxide emission factor limitation using a combustion, recovery, or recapture device.* (1) The owner or operator shall notify the Agency of the intent to use a combustion, recovery, or recapture device to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions and the actual production rate in accordance with paragraphs (c)(1)(i) through (iv) of this section. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(i) Annual uncontrolled epoxide emissions. These emission estimates shall be determined in accordance with the batch process vent group determination procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U, § 63.488(b)) and shall be based on anticipated production.

(ii) A description of the combustion, recovery, or recapture device, along with the expected percent efficiency.

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(iii) Annual emissions after the combustion, recovery, or recapture device. The expected annual emissions after

control shall be determined using Equation 15.

$$AE_{\text{control}} = (AE_{\text{uncontrolled}}) \left[\left(1 - \frac{R}{100} \right) \right] \quad [\text{Equation 15}]$$

Where:

AE_{control} = Annual epoxide emissions after control, kg/yr.

$AE_{\text{uncontrolled}}$ = Annual uncontrolled epoxide emissions, determined in accordance with paragraph (c)(1)(i) of this section, kg/yr.

R = Expected control efficiency of the combustion, recovery, or recapture device, percent, as determined in § 63.1426(c).

(iv) The actual annual production rate means the annual mass of polyether polyol product produced from the applicable PMPU. This production rate shall be for the same annual time period as the annual emission estimate as calculated in accordance with paragraph (c)(1)(iii) of this section.

(2) The owner or operator shall conduct a performance test in accordance with § 63.1426(c) to determine the epoxide control efficiency of the combustion, recovery, or recapture device. The owner or operator shall then recalculate the annual epoxide emissions after control using Equation 15, except that the control efficiency, R, shall be the measured control efficiency. This information shall be submitted as part of the Notification of Compliance Status, as provided in § 63.1439(e)(5).

(3) The owner or operator shall comply with the process vent monitoring provisions in § 63.1429.

(4) The owner or operator shall comply with the process vent record-keeping requirements in paragraphs § 63.1430(b) through (d), and the process vent reporting requirements in § 63.1430(g)(1) and (h).

(d) *Compliance with epoxide emission factor limitation using extended cookout.*

(1) The owner or operator shall notify the Agency of the intent to use extended cookout to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an esti-

mate of the annual epoxide emissions after the extended cookout. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(2) The owner or operator shall determine the annual epoxide emissions in accordance with § 63.1427(d), based on anticipated production. This information shall be submitted as part of the Notification of Compliance Status, as provided in § 63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in § 63.1427(i).

(4) The owner or operator shall comply with the process vent record-keeping and reporting requirements in § 63.1430.

(e) *Compliance with the epoxide emission factor limitation through the use of extended cookout in conjunction with one or more combustion, recovery, and/or recapture device.* (1) The owner or operator shall notify the Agency of the intent to use extended cookout in conjunction with one or more combustion, recovery, and/or recapture device to comply with the annual epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions after control. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed under § 63.1439(e)(8).

(2) The owner or operator shall determine the annual epoxide emissions after control. This information shall be submitted as part of the Notification of Compliance Status, as provided in § 63.1439(e)(5).

(3) The owner or operator shall comply with the ECO monitoring provisions in § 63.1427(i).

(4) The owner or operator shall comply with the ECO recordkeeping and reporting requirements in § 63.1427(j) and (k).

(f) *Compliance with epoxide emission factor limitation without using extended cookout or a combustion, recovery, or recapture device.* (1) The owner or operator shall notify the Agency of the intent to comply with the epoxide emission factor limitation in § 63.1425(b)(1)(iii) or (b)(2)(iv) without the use of ECO or a combustion, recovery, or recapture device. The owner or operator shall prepare an estimate of the annual epoxide emissions. This notification and emission estimate shall be submitted in the Precompliance Report as specified in § 63.1439(e)(4), or in the operating permit application, as allowed in § 63.1439(e)(8).

(2) Each year after the compliance date, the owner or operator shall calculate the epoxides emission factor for the previous year. This information shall be submitted in the second Periodic Report submitted each year, as specified in § 63.1439(e)(6).

§ 63.1432 Storage vessel provisions.

(a) For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§ 63.119 through 63.123 and the HON leak inspection provisions in § 63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.

(b) When the term “storage vessel” is used in the HON storage vessel requirements in §§ 63.119 through 63.123, the definition of this term in § 63.1423 shall apply for the purposes of this subpart.

(c) When the term “Group 1 storage vessel” is used in the HON storage vessel requirements in §§ 63.119 through 63.123, the definition of this term in § 63.1423 shall apply for the purposes of this subpart.

(d) When the term “Group 2 storage vessel” is used in the HON storage vessel requirements in §§ 63.119 through 63.123, the definition of this term in § 63.1423 shall apply for the purposes of this subpart.

(e) When the HON storage vessel requirements in § 63.119 refer to “December 31, 1992,” the phrase “September 4, 1997” shall apply instead, for the purposes of this subpart.

(f) When the HON storage vessel requirements in § 63.119 refer to “April 22, 1994,” the phrase “June 1, 1999,” shall apply instead, for the purposes of this subpart.

(g) The owner or operator of an affected source shall comply with this paragraph instead of § 63.120(d)(1)(ii) for the purposes of this subpart. If the combustion, recovery, or recapture device used to comply with § 63.119(e) is also used to comply with any of the requirements found in §§ 63.1425 through 63.1431 and/or § 63.1433, the performance test required in or accepted by §§ 63.1425 through 63.1431 and/or § 63.1433 is acceptable for demonstrating compliance with the HON storage vessel requirements in § 63.119(e), for the purposes of this subpart. The owner or operator will not be required to prepare a design evaluation for the combustion, recovery, or recapture device as described in § 63.120(d)(1)(i), if the performance test meets the criteria specified in paragraphs (g)(1) and (2) of this section.

(1) The performance test demonstrates that the combustion, recovery, or recapture device achieves greater than or equal to the required control efficiency specified in the HON storage vessel requirements in § 63.119(e)(1) or (2), as applicable; and

(2) The performance test is submitted as part of the Notification of Compliance Status required by § 63.1439(e)(5).

(h) When the HON storage vessel requirements in §§ 63.120(d)(3)(i), 63.120(d)(5), and 63.122(g)(2) use the term “range,” the term “level” shall apply instead for the purposes of this subpart.

(i) For purposes of this subpart, the monitoring plan required by the HON storage vessel requirements in § 63.120(d)(2) shall specify for which combustion, recovery, or recapture device the owner or operator has selected to follow the procedures for continuous monitoring specified in § 63.1438. For the combustion, recovery, or recapture device(s) for which the owner or operator has selected not to follow the procedures for continuous monitoring

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specified in § 63.1438, the monitoring plan shall include a description of the parameter(s) to be monitored to ensure that the combustion, recovery, or recapture device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter(s), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised), as specified in § 63.120(d)(2)(i).

(j) For purposes of this subpart, the monitoring plan required by § 63.122(b) shall be included in the Notification of Compliance Status required by § 63.1439(e)(5).

(k) When the HON Notification of Compliance Status requirements contained in § 63.152(b) are referred to in §§ 63.120, 63.122, and 63.123, the Notification of Compliance Status requirements contained in § 63.1439(e)(5) shall apply for the purposes of this subpart.

(l) When the HON Periodic Report requirements contained in § 63.152(c) are referred to in §§ 63.120 and 63.122, the Periodic Report requirements contained in § 63.1439(e)(6) shall apply for the purposes of this subpart.

(m) When other reports as required in § 63.152(d) are referred to in § 63.122, the reporting requirements contained in § 63.1439(e)(7) shall apply for the purposes of this subpart.

(n) When the HON Initial Notification requirements contained in § 63.151(b) are referred to in § 63.119 through § 63.123, the owner or operator shall comply with the Initial Notification requirements contained in § 63.1439(e)(3), for the purposes of this subpart.

(o) When the determination of equivalence criteria in § 63.102(b) are referred to in the HON storage vessel requirements in § 63.121(a), the General Provisions' alternative nonopacity emission provisions in § 63.6(g) shall apply for the purposes of this subpart.

(p) The compliance date for storage vessels at affected sources subject to the provisions of this section is specified in § 63.1422.

(q) In addition to the records required by § 63.123, the owner or operator of each storage vessel that is complying with § 63.119(e) and that has an applicable monitoring plan in accord-

ance with § 63.120(d)(2) that does not specify continuous monitoring, shall maintain records of all times when the storage tank is being filled (i.e., when the liquid level in the storage vessel is being raised). These records shall consist of documentation of the time when each filling period begins and ends.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000]

§ 63.1433 Wastewater provisions.

(a) *Process wastewater.* Except as specified in paragraph (c) of this section, the owner or operator of each affected source shall comply with the HON wastewater requirements in §§ 63.132 through 63.147 for each process wastewater stream originating at an affected source, with the HON leak inspection requirements in § 63.148, and with the HON requirements in § 63.149 for equipment that is subject to § 63.149, with the differences noted in paragraphs (a)(1) through (20) of this section. Further, the owner or operator of each affected source shall comply with the requirements of § 63.105(a) for maintenance wastewater, as specified in paragraph (b) of this section.

(1) Owners and operators of affected sources are not required to comply with the HON new source wastewater requirements in § 63.132(b)(1) and § 63.132(d) for the purposes of this subpart. Owners or operators of all new affected sources, as defined in this subpart, shall comply with the HON requirements for existing sources in §§ 63.132 through 63.149, with the exceptions noted in paragraphs (a)(2) through (20) of this section.

(2) The provisions of paragraphs (a)(2)(i), (ii), and (a)(10)(iii) of this section clarify the organic HAP that an owner or operator shall consider when complying with the requirements of §§ 63.132 through 63.149.

(i) Owners and operators are exempt from all requirements in §§ 63.132 through 63.149 that pertain solely and exclusively to organic HAP listed on Table 8 of 40 CFR part 63, subpart G.

(ii) When the HON requirements in §§ 63.132 through 63.149 refer to Table 9 compounds, the owner or operator is only required to consider compounds that meet the definition of organic HAP in § 63.1423 and that are listed in

Table 9 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(iii) When §§ 63.132 through 63.149 refer to compounds in Table 36 of 40 CFR part 63, subpart G, or compounds in List 1 or List 2 of Table 36 of 40 CFR part 63, subpart G, the owner or operator is only required to consider compounds that meet the definition of organic HAP in § 63.1423 and that are listed on Table 36 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(3) When the determination of equivalence criteria in § 63.102(b) is referred to in §§ 63.132, 63.133, and 63.137, the General Provisions' alternative nonopacity emission standard provisions in § 63.6(g) shall apply for the purposes of this subpart.

(4) When the HON storage vessel requirements contained in §§ 63.119 through 63.123 are referred to in §§ 63.132 through 63.148, the HON storage vessel requirements in §§ 63.119 through 63.123 are applicable, with the exception of the differences referred to in the storage vessel requirements in § 63.1432, for the purposes of this subpart.

(5) When the HON process wastewater reporting requirements in § 63.146(a) require the submission of a request for approval to monitor alternative parameters according to the procedures specified in § 63.151(f) or (g), the owner or operator requesting to monitor alternative parameters shall follow the procedures specified in § 63.1439(f) for the purposes of this subpart.

(6) When the HON process wastewater recordkeeping requirements in § 63.147(d) require the owner or operator to keep records of the daily average value of each continuously monitored parameter for each operating day as specified in the HON recordkeeping provisions in § 63.152(f), the owner or operator shall instead keep records of the daily average value of each continuously monitored parameter as specified in § 63.1439(d), for the purposes of this subpart.

(7) When §§ 63.132 through 63.149 refer to an "existing source," the term *existing affected source*, as defined in § 63.1420(a)(2), shall apply for the purposes of this subpart.

(8) When the HON requirements in §§ 63.132 through 63.149 refer to a "new source," the term *new affected source*,

as defined in § 63.1420(a)(3), shall apply for the purposes of this subpart.

(9) When the HON process wastewater provisions in § 63.132 (a) and (b) refer to the "applicable dates specified in § 63.100 of subpart F of this part," the applicable compliance dates specified in § 63.1422 shall apply, for the purposes of this subpart.

(10) Whenever the HON process wastewater provisions in §§ 63.132 through 63.147 refer to a Group 1 wastewater stream or a Group 2 wastewater stream, the definitions of these terms contained in § 63.1423 shall apply, for the purposes of this subpart.

(11) When the HON control requirements for certain liquid streams in open systems, in § 63.149(d), refer to "§ 63.100(f) of subpart F," the phrase "§ 63.1420(c)," shall apply for the purposes of this subpart. In addition, where § 63.149(d) states "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, or H of this part," the phrase "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, H, or PPP of this part," shall apply for the purposes of this subpart.

(12) When the HON control requirements for certain liquid streams in open systems, in § 63.149(e) (1) and (2), refer to "a chemical manufacturing process unit subject to the new source requirements of 40 CFR 63.100(l) (1) or (2)," the phrase "a new affected source as described in § 63.1420(a)(4)," shall apply for the purposes of this subpart.

(13) When the HON Notification of Compliance Status requirements contained in § 63.152(b) are referred to in the HON process wastewater provisions in § 63.138 or § 63.146, the Notification of Compliance Status requirements contained in § 63.1439(e)(5) shall apply for the purposes of this subpart. In addition, when the HON process wastewater provisions in § 63.138 or § 63.146 require that information be reported according to § 63.152(b) in the HON Notification of Compliance Status, owners or operators of affected sources shall report the specified information in the Notification of Compliance Status required by § 63.1439(e)(5), for the purposes of this subpart.

(14) When the HON Periodic Report requirements contained in § 63.152(c) are referred to in the HON process wastewater provisions in § 63.146, the Periodic Report requirements contained in § 63.1439(e)(6) shall apply for the purposes of this subpart. In addition, when § 63.146 requires that information be reported in the HON Periodic Reports required in § 63.152(c), owners or operators of affected sources shall report the specified information in the Periodic Reports required in § 63.1439(e)(6), for the purposes of this subpart.

(15) When the term “range” is used in the HON requirements in §§ 63.132 through 63.149, the term “level” shall be used instead, for the purposes of this subpart. This level shall be determined using the procedures specified in parameter monitoring procedures in § 63.1438.

(16) When the HON process wastewater monitoring and inspection provisions in § 63.143(f) specify that the owner or operator shall establish the range that indicates proper operation of the treatment process or control technique, the owner or operator shall instead comply with the requirements § 63.1438 (c) or (d) for establishing parameter level maximums/minimums, for the purposes of this subpart.

(17) When the HON process wastewater provisions in § 63.146(b) (7) and (8) require that “the information on parameter ranges specified in § 63.152(b)(2)” be reported in the HON Notification of Compliance Status, owners and operators of affected sources are instead required to report the information on parameter levels in the Notification of Compliance Status as specified in § 63.1439(e)(5)(ii), for the purposes of this subpart.

(18) For the purposes of this subpart, the owner or operator is not required to comply with the HON process wastewater emission reduction provisions in § 63.138(g).

(19) When the provisions of HON process wastewater provisions in § 63.139(c)(1)(ii), § 63.145(d)(4), or § 63.145(i)(2) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Meth-

od 25A, 40 CFR part 60, appendix A shall comply with paragraphs (a)(19) (i) and (ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(20) The owner or operator of a facility which receives a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream, for treatment pursuant to the HON provisions in § 63.132(g) is subject to the requirements of § 63.132(g), with the differences identified in this section, and is not subject to the NESHAP from off-site waste and recovery operations in 40 CFR part 63, subpart DD, with respect to the received material.

(b) *Maintenance wastewater.* The owner or operator of each affected source shall comply with the HON maintenance wastewater requirements in § 63.105, with the exceptions noted in paragraphs (b) (1), (2), and (3) of this section.

(1) When the HON maintenance wastewater provisions in § 63.105(a) refer to “organic HAPs listed in Table 9 of subpart G of this part,” the owner or operator is only required to consider compounds that meet the definition of *organic HAP* in § 63.1423 and that are listed in Table 9 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(2) When the term “maintenance wastewater” is used in the HON maintenance wastewater provisions in § 63.105, the definition of “maintenance wastewater” in § 63.1423 shall apply, for the purposes of this subpart.

(3) When the term “wastewater” is used in the HON maintenance wastewater provisions in § 63.105, the definition of “wastewater” in § 63.1423 shall apply, for the purposes of this subpart.

(c) *Compliance date.* The compliance date for the affected source subject to

the provisions of this section is specified in § 63.1422.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000]

§ 63.1434 Equipment leak provisions.

(a) The owner or operator of each affected source shall comply with the HON equipment leak requirements in 40 CFR part 63, subpart H for all equipment in organic HAP service, except § 63.165 and as specified in paragraphs (b) through (h) of this section.

(b) The compliance date for the equipment leak provisions in this section is provided in § 63.1422(d).

(c) *Requirements for pressure relief devices.* Except as specified in paragraph (c)(4) of this section, the owner or operator must comply with the operating and pressure release requirements specified in paragraphs (c)(1) and (2) of this section for pressure relief devices in organic HAP gas or vapor service. Except as specified in paragraph (c)(4) of this section, the owner or operator must also comply with the pressure release management requirements specified in paragraph (c)(3) of this section for all pressure relief devices in organic HAP service.

(1) *Operating requirements.* Except during a pressure release event, operate each pressure relief device in organic HAP gas or vapor service with an instrument reading of less than 500 ppm above background as detected by Method 21 of 40 CFR part 60, appendix A.

(2) *Pressure release requirements.* For pressure relief devices in organic HAP gas or vapor service, comply with paragraphs (c)(2)(i) or (ii) of this section, as applicable.

(i) If the pressure relief device does not consist of or include a rupture disk, conduct instrument monitoring, as detected by Method 21 of 40 CFR part 60, appendix A, no later than 5 calendar days after the pressure release to verify that the pressure relief device is operating with an instrument reading of less than 500 ppm above background, except as provided in § 63.171.

(ii) If the pressure relief device consists of or includes a rupture disk, install a replacement disk as soon as practicable after a pressure release, but no later than 5 calendar days after the

pressure release, except as provided in § 63.171.

(3) *Pressure release management.* Except as specified in paragraph (c)(4) of this section, pressure releases to the atmosphere from pressure relief devices in organic HAP service are prohibited, and the owner or operator must comply with the requirements specified in paragraphs (c)(3)(i) and (ii) of this section for all pressure relief devices in organic HAP service.

(i) For each pressure relief device in organic HAP service, the owner or operator must equip each pressure relief device with a device(s) or use a monitoring system that is capable of:

(A) Identifying the pressure release;

(B) Recording the time and duration of each pressure release; and

(C) Notifying operators immediately that a pressure release is occurring. The device or monitoring system may be either specific to the pressure relief device itself or may be associated with the process system or piping, sufficient to indicate a pressure release to the atmosphere. Examples of these types of devices and systems include, but are not limited to, a rupture disk indicator, magnetic sensor, motion detector on the pressure relief valve stem, flow monitor, or pressure monitor.

(ii) If any pressure relief device in organic HAP service releases to atmosphere as a result of a pressure release event, the owner or operator must calculate the quantity of organic HAP released during each pressure release event and report this quantity as required in § 63.1439(e)(6)(ix). Calculations may be based on data from the pressure relief device monitoring alone or in combination with process parameter monitoring data and process knowledge.

(4) *Pressure relief devices routed to a control device, process, or drain system.* If a pressure relief device in organic HAP service is designed and operated to route all pressure releases through a closed vent system to a control device, process, or drain system, the owner or operator is not required to comply with paragraphs (c)(1), (2), or (3) (if applicable) of this section. Both the closed vent system and control device (if applicable) must meet the requirements

of § 63.172. The drain system (if applicable) must meet the requirements of § 63.136.

(d) When the HON equipment leak Initial Notification requirements contained in §§ 63.182(a)(1) and 63.182(b) are referred to in 40 CFR part 63, subpart H, the owner or operator shall comply with the Initial Notification requirements contained in § 63.1439(e)(3), for the purposes of this subpart. The Initial Notification shall be submitted no later than June 1, 2000 for existing sources, as stated in § 63.1439(e)(3)(ii)(A).

(e) The HON equipment leak Notification of Compliance Status required by §§ 63.182(a)(2) and 63.182(c) shall be submitted within 150 days (rather than 90 days) of the applicable compliance date specified in § 63.1422 for the equipment leak provisions. The Initial Notification shall be submitted no later than June 1, 2000 for existing sources.

(f) The Periodic Reports required by §§ 63.182(a)(3) and 63.182(d) may be submitted as part of the Periodic Reports required by § 63.1439(e)(6).

(g) If specific items of equipment, comprising part of a process unit subject to this subpart, are managed by different administrative organizations (e.g., different companies, affiliates, departments, divisions, etc.), those items of equipment may be aggregated with any PMPU within the affected source for all purposes under subpart H, providing there is no delay in achieving the applicable compliance date.

(h) The phrase “the provisions of subparts F, I, or PPP of this part” shall apply instead of the phrase “the provisions of subparts F or I of this part,” and instead of the phrase “the provisions of subpart F or I of this part” throughout §§ 63.163 and 63.168, for the purposes of this subpart. In addition, the phrase “subparts F, I, and PPP” shall apply instead of the phrase “subparts F and I” in § 63.174(c)(2)(iii), for the purposes of this subpart.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000; 79 FR 17378, Mar. 27, 2014]

§ 63.1435 Heat exchanger provisions.

(a) The owner or operator of each affected source shall comply with the re-

quirements of § 63.104 for heat exchange systems, with the exceptions noted in paragraphs (b) through (e) of this section.

(b) When the term “chemical manufacturing process unit” is used in § 63.104, the term “polyether polyols manufacturing process unit” shall apply for the purposes of this subpart. Further, when the phrase “a chemical manufacturing process unit meeting the conditions of § 63.100(b)(1) through (3) of this subpart, except for chemical manufacturing process units meeting the condition specified in § 63.100(c) of this subpart” is used in § 63.104(a), the term “PMPU, except for PMPU meeting the conditions specified in § 63.1420(b)” shall apply for the purposes of this subpart.

(c) When the HON heat exchange system requirements in § 63.104(c)(3) specify the monitoring plan retention requirements, and when § 63.104(f)(1) refers to the record retention requirements in § 63.103(c)(1), the provisions of the general recordkeeping and reporting requirements in § 63.1439(a) and the applicable provisions of the General Provisions in 40 CFR part 63, subpart A, as specified in Table 1 of this subpart, shall apply for the purposes of this subpart.

(d) When the HON heat exchange system requirements in § 63.104(f)(2) require information to be reported in the Periodic Reports required by the HON general reporting provisions in § 63.152(c), the owner or operator shall instead report the information specified in § 63.104(f)(2) in the Periodic Reports required by the general reporting requirements in § 63.1439(e)(6), for the purposes of this subpart.

(e) When the HON heat exchange system requirements in § 63.104 refer to Table 4 of 40 CFR part 63, subpart F or Table 9 of 40 CFR part 63, subpart G, the owner or operator is only required to consider organic HAP listed in Table 4 of 40 CFR part 63, subpart F or 40 CFR part 63, Table 9 of subpart G that are also listed on Table 4 of this subpart, for the purposes of this subpart.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000]

§ 63.1436 [Reserved]

§ 63.1437 Additional requirements for performance testing.

(a) Performance testing shall be conducted in accordance with § 63.7(a)(1), (a)(3), (d), (e)(2), (e)(4), (g), and (h), with the exceptions specified in paragraphs (a)(1) through (4) of this section and the additions specified in paragraph (b) of this section. Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown unless specified by the Administrator or an applicable subpart. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(1) Performance tests shall be conducted according to the general provisions' performance testing requirements in § 63.7(e)(2), except that for all emission sources except process vents from batch unit operations, performance tests shall be conducted during maximum representative operating conditions for the process achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraphs (a)(1)(ii) or (iii) of this section to occur. For process vents from batch unit operations, performance tests shall be conducted either at absolute worst-case conditions or hypothetical worst-case conditions, as defined in § 63.1426(c)(3)(i)(B), that are achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraph (a)(1)(ii) or (iii) of this section to occur.

(i) The 6-month period that ends 2 months before the Notification of Compliance Status is due, according to § 63.1439(e)(5); or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test.

(ii) Causing damage to equipment; necessitating that the owner or operator make a product that does not meet an existing specification for sale to a customer; or necessitating that the owner or operator make a product in excess of demand.

(iii) Causing plant or testing personnel to be subject to unsafe conditions. Owners or operators that limit testing based on this paragraph shall maintain documentation that demonstrates the nature of the unsafe conditions and explains measures considered by the owner or operator to overcome these conditions. If requested, this documentation shall be provided to the Administrator.

(2) When the General Provisions' data analysis, recordkeeping, and reporting requirements in § 63.7(g) refer to the Notification of Compliance Status requirements in § 63.9(h), the Notification of Compliance Status requirements in § 63.1439(e)(5) shall instead apply, for the purposes of this subpart.

(3) Because the General Provisions' site-specific test plan in § 63.7(c)(3) is not required, the General Provisions' requirement for the Administrator to approve or deny site-specific test plans, in § 63.7(h)(4)(ii), is not applicable for the purposes of this subpart.

(4) The owner or operator of an affected source shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected source shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled test date of the performance test, or by arranging a rescheduled date with the

Administrator (or delegated State or local agency) by mutual agreement.

(b) Data shall be reduced in accordance with the EPA approved methods specified in the applicable subpart or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301, 40 CFR part 63, appendix A.

(c) Notwithstanding any other provision of this subpart, if an owner or operator of an affected source uses a flare to comply with any of the requirements of this subpart, the owner or operator shall comply with paragraphs (c)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration. If a compliance demonstration has been conducted previously for a flare, using the techniques specified in paragraphs (c)(1) through (3) of this section, that compliance demonstration may be used to satisfy the requirements of this paragraph if either no deliberate process changes have been made since the compliance demonstration, or the results of the compliance demonstration reliably demonstrate compliance despite process changes.

(1) Conduct a visible emission test using the techniques specified in § 63.11(b)(4) of the General Provisions;

(2) Determine the net heating value of the gas being combusted, using the techniques specified in § 63.11(b)(6) of the General Provisions; and

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7)(i) (and § 63.11(b)(7)(iii), where applicable) or § 63.11(b)(8) of the General Provisions, as appropriate.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26501, May 8, 2000; 79 FR 17378, Mar. 27, 2014]

§ 63.1438 Parameter monitoring levels and excursions.

(a) *Establishment of parameter monitoring levels.* The owner or operator of a combustion, recovery, or recapture device that has one or more parameter monitoring level requirements specified under this subpart shall establish a maximum or minimum level for each measured parameter. If a performance test is required by this subpart for a

combustion, recovery, or recapture device, the owner or operator shall use the procedures in either paragraph (b) or (c) of this section to establish the parameter monitoring level(s). If a performance test is not required by this subpart for a combustion, recovery, or recapture device, the owner or operator may use the procedures in paragraph (b), (c), or (d) of this section to establish the parameter monitoring levels. When using the procedures specified in paragraph (c) or (d) of this section, the owner or operator shall submit the information specified in § 63.1439(e)(4)(viii) for review and approval, as part of the Precompliance Report.

(1) The owner or operator shall operate combustion, recovery, and recapture devices such that the daily average value of monitored parameters remains at or above the minimum established level, or remains at or below the maximum established level, except as otherwise provided in this subpart.

(2) As specified in § 63.1439(e)(5)(ii), all established levels, along with their supporting documentation and the definition of an operating day, shall be submitted as part of the Notification of Compliance Status.

(3) Nothing in this section shall be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of 40 CFR part 63, subparts A, F, G, or H.

(b) *Establishment of parameter monitoring levels based exclusively on performance tests.* In cases where a performance test is required by this subpart, or the owner or operator of the affected source elects to do a performance test in accordance with the provisions of this subpart, and an owner or operator elects to establish a parameter monitoring level for a combustion, recovery, or recapture device based exclusively on parameter values measured during the performance test, the owner or operator of the affected source shall comply with the procedures in paragraph (b)(1) or (2) of this section, as applicable.

(1) *Process vents from continuous unit operations.* During initial compliance testing, the appropriate parameter shall be continuously monitored during

the required 1-hour runs for process vents from continuous unit operations. The monitoring level(s) shall then be established as the average of the maximum (or minimum) point values from the three 1-hour test runs. The average of the maximum values shall be used when establishing a maximum level, and the average of the minimum values shall be used when establishing a minimum level.

(2) *Process vents from batch unit operations.* For process vents from batch unit operations, during initial compliance testing, the appropriate parameter shall be monitored continuously during the entire test period. The monitoring level(s) shall be those established during from the compliance test.

(c) *Establishment of parameter monitoring levels based on performance tests, supplemented by engineering assessments and/or manufacturer's recommendations.* Parameter monitoring levels established under this paragraph shall be based on the parameter values measured during the performance test supplemented by engineering assessments and/or manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values. The information specified in paragraphs (c)(1) and (2) of this section shall be provided in the Notification of Compliance Status.

(1) The specific level of the monitored parameter(s) for each emission point.

(2) The rationale for the specific level for each parameter for each emission point, including any data and calculations used to develop the level and a description of why the level indicates proper operation of the combustion, recovery, or recapture device.

(d) *Establishment of parameter monitoring based on engineering assessments and/or manufacturer's recommendations.* If a performance test is not required by this subpart for a combustion, recovery, or recapture device, the maximum or minimum level may be based solely on engineering assessments and/or manufacturers' recommendations. As required in paragraph (a)(2) of this section, the determined level and all supporting documentation shall be pro-

vided in the Notification of Compliance Status.

(e) *Monitoring violations.* (1) Each excursion, as defined in paragraphs (f)(1)(i), (f)(2)(i)(A), (f)(2)(ii), (f)(3)(i), and (f)(4) of this section, constitutes a violation of the provisions of this subpart in accordance with paragraphs (e)(1)(i), (ii), or (iii) of this section.

(i) For each condenser, each excursion constitutes a violation of the emission limit.

(ii) For each recovery or recapture device other than a condenser, where an organic monitoring device is used to monitor concentration, each excursion constitutes a violation of the emission limit.

(iii) For each combustion, recovery, or recapture device other than a condenser, each excursion constitutes a violation of the operating limit.

(2) Each excursion, as defined in paragraphs (f)(1)(ii), (f)(1)(iii), (f)(2)(i)(B), and (f)(3)(ii) of this section constitutes a violation of the operating limit.

(f) *Parameter monitoring excursion definitions.* Parameter monitoring excursions are defined in paragraphs (f)(1) through (3) of this section.

(1) With respect to storage vessels (where the applicable monitoring plan specifies continuous monitoring), process vents from continuous unit operations using combustion, recovery, or recapture devices for purposes of compliance, and for process wastewater streams, an excursion means any of the three cases listed in paragraphs (f)(1)(i) through (iii) of this section.

(i) The daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters.

(ii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this section, is 4 hours or greater in an operating day and monitoring data are insufficient, as defined in paragraph (f)(1)(iv) of this section, to constitute a valid hour of data for at least 75 percent of the operating hours.

(iii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this section, is less than 4

hours in an operating day and more than 2 of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in paragraph (f)(1)(iv) of this section.

(iv) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (f)(1)(ii) and (iii) of this section, if measured values are unavailable due to monitoring system breakdowns, repairs, calibrated checks, or zero (low-level) and high level adjustments, for any of the 15-minute periods within the hour. For data compression systems approved under § 63.1439(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(v) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies, are not considered to be part of the period of combustion, recovery, or recapture device operation, for the purposes of paragraphs (f)(1)(ii) and (iii) of this section.

(2) For storage vessels where the applicable monitoring plan does not specify continuous monitoring, an excursion is defined in paragraph (f)(2)(i) or (ii) of this section, as applicable.

(i) If the monitoring plan specifies monitoring a parameter and recording its value at specific intervals (such as every 15 minutes or every hour), either of the cases listed in paragraph (f)(2)(i)(A) or (B) of this section is considered a single excursion for the combustion device.

(A) When the average value of one or more parameters, averaged over the time during which the storage vessel is being filled (i.e., when the liquid level in the storage vessel is being raised), is above the maximum level or below the minimum level established for the given parameters.

(B) When monitoring data are insufficient. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the specific intervals at which parameters are to be monitored

and recorded, according to the storage vessel's monitoring plan, during which the storage vessel is being filled.

(ii) If the monitoring plan does not specify monitoring a parameter and recording its value at specific intervals (for example, if the relevant operating requirement is to exchange a disposable carbon canister before expiration of its rated service life), the monitoring plan shall define an excursion in terms of the relevant operating requirement.

(3) With respect to process vents from batch unit operations, an excursion means one of the two cases listed in paragraphs (f)(3)(i) and (ii) of this section.

(i) When the daily average value of one or more monitored parameters is above the maximum or below the minimum established level for the given parameters.

(ii) When monitoring data are insufficient for an operating day. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the 15-minute periods when batch emission episodes selected to be controlled are being vented to the control device during the operating day, using the procedures specified in paragraphs (f)(3)(ii)(A) through (D) of this section.

(A) Determine the total amount of time during the operating day when batch emission episodes selected to be controlled are being vented to the control device.

(B) Subtract the time during the periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies, from the total amount of time determined above in paragraph (f)(3)(ii)(A) of this section, to obtain the operating time used to determine if monitoring data are insufficient.

(C) Determine the total number of 15-minute periods in the operating time used to determine if monitoring data are insufficient, as was determined in accordance with paragraph (f)(3)(ii)(B) of this section.

(D) If measured values are not available for at least 75 percent of the total number of 15-minute periods determined in paragraph (f)(3)(ii)(C) of this section, the monitoring data are insufficient for the operating day.

(4) With respect to process vents using ECO to reduce epoxide emissions, an excursion means any of the situations described in § 63.1427(i)(3)(i) through (v). For each excursion, the owner or operator shall be deemed out of compliance with the provisions of this subpart, in accordance with paragraph (e) of this section.

[64 FR 29439, June 1, 1999, as amended at 79 FR 17379, Mar. 27, 2014]

§ 63.1439 General recordkeeping and reporting provisions.

(a) *Data retention.* Unless otherwise specified in this subpart, the owner or operator of an affected source shall keep copies of all applicable records and reports required by this subpart for at least 5 years. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche. If an owner or operator submits copies of reports to the applicable EPA Regional Office, the owner or operator is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of § 63.10(a)(4)(ii) for submittal of copies of reports, the owner or operator is not required to maintain copies of reports.

(b) *Subpart A requirements.* The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 CFR part 63, subpart A (the General Provisions) as specified in Table 1 of this subpart. These requirements include, but are not limited to, the requirements specified in paragraphs (b)(1) and (2) of this section.

(1) *Malfunction recordkeeping and reporting.* (i) *Records of malfunctions.* The owner or operator shall keep the records specified in paragraphs (b)(1)(i)(A) through (C) of this section.

(A) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure record the date, time, and duration of each failure.

(B) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(C) Record actions taken to minimize emissions in accordance with § 63.1420(h)(4), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(ii) *Reports of malfunctions.* If a source fails to meet an applicable standard, report such events in the Periodic Report. Report the number of failures to meet an applicable standard. For each instance, report the date, time, and duration of each failure. For each failure the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(2) *Application for approval of construction or reconstruction.* For new affected sources, the owner or operator shall comply with the General Provisions' requirements for the application for approval of construction or reconstruction, as specified in § 63.5, excluding the provisions specified in § 63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii).

(c) *Subpart H requirements.* The owner or operator of an affected source shall comply with the HON equipment leak reporting and recordkeeping requirements in 40 CFR part 63, subpart H, except as specified in § 63.1434(b) through (h).

(d) *Recordkeeping and documentation.* The owner or operator required to keep continuous records shall keep records as specified in paragraphs (d)(1) through (10) of this section, unless an alternative recordkeeping system has

been requested and approved as specified in paragraph (g) of this section, and except as provided in paragraph (h) of this section. If a monitoring plan for storage vessels pursuant to § 63.1432(i) requires continuous records, the monitoring plan shall specify which provisions, if any, of paragraphs (d)(1) through (10) of this section apply. As described in § 63.1432(i), certain storage vessels are not required to keep continuous records as specified in this paragraph. The owner or operator of such storage vessels shall keep records as specified in the monitoring plan required by § 63.1432(i).

(1) The monitoring system shall measure data values at least once during approximately equal 15-minute intervals.

(2) The owner or operator shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values. The owner or operator of process vents from batch unit operations shall record each measured data value.

(3) Daily average values of each continuously monitored parameter shall be calculated for each operating day as specified in paragraphs (d)(3)(i) through (ii) of this section, except as specified in paragraphs (d)(6) and (7) of this section.

(i) The daily average value shall be calculated as the average of all parameter values recorded during the operating day, except as specified in paragraph (d)(7) of this section. The calculated average shall cover a 24-hour period if operation is continuous. If intermittent emissions episodes occur resulting in emissions being vented to a combustion, recapture, or recovery device for a period of less than 24 hours in the operating day, the daily average shall be calculated based only on the period when emissions are being vented to the combustion, recapture, or recovery device. For example, if a batch unit operation operates such that emissions are vented to a combustion device for 6 hours, then the daily average is the av-

erage of the temperature measurements taken during those 6 hours.

(ii) The operating day shall be the 24-hour period that the owner or operator specifies in the operating permit or the Notification of Compliance Status, for purposes of determining daily average values.

(4)–(5) [Reserved]

(6) If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average for that operating day.

(7) Monitoring data recorded during periods identified in paragraphs (d)(7)(i) and (ii) of this section shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or combustion, recovery, or recapture device operation when monitors are not operating.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; or

(ii) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(8) For continuous monitoring systems used to comply with this subpart, records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(9) The owner or operator of an affected source granted a waiver of recordkeeping or reporting requirements under the General Provisions' recordkeeping and reporting requirements in § 63.10(f) shall maintain the information, if any, specified by the Administrator as a condition of the waiver of

recordkeeping or reporting requirements.

(10) For pressure relief devices in organic HAP service, keep records of the information specified in paragraphs (d)(10)(i) through (v) of this section, as applicable.

(i) A list of identification numbers for pressure relief devices that the owner or operator elects to equip with a closed-vent system and control device, subject to the provisions in § 63.1434(c)(4).

(ii) A list of identification numbers for pressure relief devices subject to the provisions in § 63.1434(c)(1).

(iii) A list of identification numbers for pressure relief devices equipped with rupture disks, subject to the provisions in § 63.1434(c)(2)(ii).

(iv) The dates and results of the Method 21 of 40 CFR part 60, appendix A, monitoring following a pressure release for each pressure relief device subject to the provisions in § 63.1434(c)(1) and (2). The results shall include:

(A) The background level measured during each compliance test.

(B) The maximum instrument reading measured at each piece of equipment during each compliance test.

(v) For pressure relief devices in organic HAP service subject to § 63.1434(c)(3), keep records of each pressure release to the atmosphere, including the following information:

(A) The source, nature, and cause of the pressure release.

(B) The date, time, and duration of the pressure release.

(C) The quantity of total HAP emitted during the pressure release and the calculations used for determining this quantity.

(D) The actions taken to prevent this pressure release.

(E) The measures adopted to prevent future such pressure releases.

(e) *Reporting and notification.* In addition to the reports and notifications required by 40 CFR part 63, subpart A, as specified in this subpart, the owner or operator of an affected source shall prepare and submit the reports listed in paragraphs (e)(3) through (9) of this section, as applicable. All reports required by this subpart, and the sched-

ule for their submittal, are listed in Table 8 of this subpart.

(1) *Violation of reporting requirements.* Owners and operators shall not be in violation of the reporting requirements of this paragraph (e) for failing to submit information required to be included in a specified report if the owner or operator meets the requirements in paragraphs (e)(1)(i) through (iii) of this section. Examples of circumstances where this paragraph may apply include information related to newly-added equipment or emission points, changes in the process, changes in equipment required or utilized for compliance with the requirements of this subpart, or changes in methods or equipment for monitoring, record-keeping, or reporting.

(i) The information was not known in time for inclusion in the report specified by this subpart.

(ii) The owner or operator has been diligent in obtaining the information.

(iii) The owner or operator submits a report according to the provisions of paragraphs (e)(1)(iii)(A) through (C) of this section.

(A) If this subpart expressly provides for supplements to the report in which the information is required, the owner or operator shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in this subpart.

(B) If this subpart does not expressly provide for supplements, but the owner or operator must submit a request for revision of an operating permit pursuant to the State operating permit programs in part 70 or the Federal operating permit programs in part 71, due to circumstances to which the information pertains, the owner or operator shall submit the information with the request for revision to the operating permit.

(C) In any case not addressed by paragraph (e)(1)(iii)(A) or (B) of this section, the owner or operator shall submit the information with the first Periodic Report, as required by this subpart, which has a submission deadline at least 60 days after the information is obtained.

(2) *Submittal of reports.* All reports required under this subpart shall be sent to the Administrator at the applicable address listed in the General Provisions' list of addresses of State air pollution control agencies and EPA Regional Offices, in § 63.13. If acceptable to both the Administrator and the owner or operator of a source, reports may be submitted on electronic media.

(3) *Initial Notification.* The owner or operator of a new affected source shall submit a written Initial Notification to the Administrator containing the information described in paragraph (e)(3)(i) of this section according to the schedule in paragraph (e)(3)(ii) of this section. The General Provisions' Initial Notification requirements in § 63.9(b)(2) and (3) shall not apply for the purposes of this subpart.

(i) The Initial Notification shall include the following information:

(A) The name and address of the owner or operator;

(B) The address (physical location) of the affected source;

(C) An identification of the kinds of emission points within the affected source;

(D) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date; and

(E) A statement of whether or not the affected source is a major source.

(ii) The Initial Notification shall be submitted according to the schedule in paragraph (e)(3)(ii)(A), (B), or (C) of this section, as applicable.

(A) [Reserved]

(B) For a new source that has an initial start-up on or after August 30, 1999, the application for approval of construction or reconstruction required by the General Provisions in § 63.5(d) shall be submitted in lieu of the Initial Notification. The application shall be submitted as soon as practical before construction or reconstruction is planned to commence (but it need not be sooner than August 30, 1999).

(C) For a new source that has an initial start-up prior to August 30, 1999, the Initial Notification shall be submitted no later than August 30, 1999. The application for approval of construction or reconstruction described in the General Provisions' require-

ments in § 63.5(d) is not required for these sources.

(4) *Precompliance Report.* The owner or operator of an affected source requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and record-keeping, or alternative controls; or requesting approval to establish parameter monitoring levels according to the procedures contained in § 63.1438(c) or (d) shall submit a Precompliance Report according to the schedule described in paragraph (e)(4)(i) of this section. The Precompliance Report shall contain the information specified in paragraphs (e)(4)(ii) through (viii) of this section, as appropriate.

(i) The Precompliance Report shall be submitted to the Administrator no later than 12 months prior to the compliance date. Unless the Administrator objects to a request submitted in the Precompliance Report within 45 days after its receipt, the request shall be deemed approved. For new affected sources, the Precompliance Report shall be submitted to the Administrator with the application for approval of construction or reconstruction required in paragraph (b)(2) of this section. Supplements to the Precompliance Report may be submitted as specified in paragraph (e)(4)(vii) of this section. To submit a Precompliance Report for the first time after the compliance date to request an extension for compliance; request approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; or request approval to establish parameter monitoring levels according to the procedures contained in § 63.1438(c) or (d), the owner or operator shall notify the Administrator at least 90 days before the planned change is to be implemented; the change shall be considered approved if the Administrator either approves the change in writing, or fails to disapprove the change in writing within 45 days of receipt.

(ii) A request for an extension for compliance, as specified in § 63.1422(e), may be submitted in the Precompliance Report. The request for a compliance extension shall include

the data outlined in the General Provisions' compliance requirements in § 63.6(i)(6)(i)(A) and (B), as required in § 63.1422(e)(1).

(iii) The alternative monitoring parameter information required in paragraph (f) of this section shall be submitted in the Precompliance Report if, for any emission point, the owner or operator of an affected source seeks to comply through the use of a control technique other than those for which monitoring parameters are specified in this subpart or in 40 CFR part 63, subpart G, or seeks to comply by monitoring a different parameter than those specified in this subpart or in 40 CFR part 63, subpart G.

(iv) If the affected source seeks to comply using alternative continuous monitoring and recordkeeping as specified in paragraph (g) of this section, the owner or operator shall submit a request for approval in the Precompliance Report.

(v) The owner or operator shall report the intent to use an alternative emission standard to comply with the provisions of this subpart in the Precompliance Report. The Administrator may deem an alternative emission standard to be equivalent to the standard required by the subpart, under the procedures outlined in the General Provisions' requirements for use of an alternative nonopacity emission standard, in § 63.6(g).

(vi) [Reserved]

(vii) Supplements to the Precompliance Report may be submitted as specified in paragraph (e)(4)(vii)(A) of this section, or as specified in paragraph (e)(4)(vii)(B) of this section. Unless the Administrator objects to a request submitted in a supplement to the Precompliance Report within 45 days after its receipt, the request shall be deemed approved.

(A) Supplements to the Precompliance Report may be submitted to clarify or modify information previously submitted.

(B) Supplements to the Precompliance Report may be submitted to request approval to use alternative monitoring parameters, as specified in paragraph (e)(4)(iii) of this section; to use alternative continuous monitoring and recordkeeping, as spec-

ified in paragraph (e)(4)(iv) of this section; or to use alternative controls, as specified in paragraph (e)(4)(v) of this section.

(viii) If an owner or operator establishes parameter monitoring levels according to the procedures contained in the parameter monitoring provisions in § 63.1438(c) or (d), the following information shall be submitted in the Precompliance Report:

(A) Identification of which procedures (i.e., § 63.1438(c) or (d)) are to be used; and

(B) A description of how the parameter monitoring level is to be established. If the procedures in § 63.1438(c) are to be used, a description of how performance test data will be used shall be included.

(5) *Notification of Compliance Status.* For existing and new affected sources, a Notification of Compliance Status shall be submitted within 150 days after the compliance dates specified in § 63.1422. For equipment leaks subject to § 63.1434, the owner or operator shall submit the information specified in the HON equipment leak Notification of Compliance Status requirements in § 63.182(c), in the Notification of Compliance Status required by this paragraph. For all other emission points, including heat exchange systems, the Notification of Compliance Status shall contain the information listed in paragraphs (e)(5)(i) through (vii) of this section. For pressure relief devices subject to the requirements of § 63.1434(c)(3), the owner or operator shall submit the information listed in paragraph (e)(5)(viii) of this section in the Notification of Compliance Status within 150 days after the first applicable compliance date for pressure relief device monitoring.

(i) The results of any emission point group determinations, process section applicability determinations, performance tests, inspections, continuous monitoring system performance evaluations, any other information required by the test method to be in the test report used to demonstrate compliance, values of monitored parameters established during performance tests, and any other information required to be included in a Notification

of Compliance Status under the requirements for overlapping regulations in § 63.1422(j), the HON storage vessel reporting provisions in § 63.122 and the storage vessel provisions in § 63.1432, and the HON process wastewater reporting provisions in § 63.146. In addition, the owner or operator shall comply with paragraphs (e)(5)(i)(A) and (B) of this section.

(A) For performance tests, group determinations, or determination that controls are needed, the Notification of Compliance Status shall include one complete test report, as described in paragraph (e)(5)(i)(B) of this section, for each test method used for a particular kind of emission point. For additional tests performed for the same kind of emission point using the same method, the results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(B) A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards (if the owner or operator prepares the standards), record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method to be in the test report.

(ii) For each monitored parameter for which a maximum or minimum level is required to be established under the HON process vent monitoring requirements in § 63.114(e) and the process vent monitoring requirements in § 63.1429(d), the HON process wastewater parameter monitoring requirements in § 63.143(f), paragraph (e)(8) of this section, or paragraph (f) of this section, the information specified in paragraphs (e)(5)(ii)(A) through (C) of this section shall be submitted. Further, as described in the storage vessel provisions in § 63.1432(k), for those storage vessels for which the parameter monitoring plan (required to be submitted under the HON Notification of

Compliance Status requirements for storage vessels in § 63.120(d)(3)) specifies compliance with the parameter monitoring provisions of § 63.1438, the owner or operator shall provide the information specified in paragraphs (e)(5)(ii)(A) through (C) of this section for each monitoring parameter. For those storage vessels for which the parameter monitoring plan required to be submitted under the HON Notification of Compliance Status requirements for storage vessels in § 63.120(d)(2) does not require compliance with the provisions of § 63.1438, the owner or operator shall provide the information specified in § 63.120(d)(3) as part of the Notification of Compliance Status.

(A) The required information shall include the specific maximum or minimum level of the monitored parameter(s) for each emission point.

(B) The required information shall include the rationale for the specific maximum or minimum level for each parameter for each emission point, including any data and calculations used to develop the level and a description of why the level indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart.

(C) The required information shall include a definition of the affected source's operating day, as specified in paragraph (d)(3)(ii) of this section, for purposes of determining daily average values of monitored parameters.

(iii) The determination of applicability for flexible operation units as specified in § 63.1420(e)(1)(iii).

(iv) The parameter monitoring levels for flexible operation units, and the basis on which these levels were selected, or a demonstration that these levels are appropriate at all times, as specified in § 63.1420(e)(5)(ii)(A).

(v) The results for each predominant use determination made under § 63.1420(f)(1) through (7), for storage vessels assigned to an affected source subject to this subpart.

(vi) If any emission point is subject to this subpart and to other standards as specified in § 63.1422(j), and if the provisions of § 63.1422(j) allow the owner or operator to choose which testing,

monitoring, reporting, and record-keeping provisions will be followed, then the Notification of Compliance Status shall indicate which rule's requirements will be followed for testing, monitoring, reporting, and record-keeping.

(vii) An owner or operator who transfers a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream for treatment pursuant to § 63.132(g) shall include in the Notification of Compliance Status the name and location of the transferee and a description of the Group 1 wastewater stream or residual sent to the treatment facility. An owner or operator who transfers a Group 1 process vent for disposal pursuant to § 63.113(i) shall include in the Notification of Compliance Status the name and location of the transferee, and the identification of the Group 1 process vent.

(viii) For pressure relief devices in organic HAP service, a description of the device or monitoring system to be implemented, including the pressure relief devices and process parameters to be monitored (if applicable), a description of the alarms or other methods by which operators will be notified of a pressure release, and a description of how the owner or operator will determine the information to be recorded under paragraphs (d)(10)(v)(B) and (C) of this section (i.e., the duration of the pressure release and the methodology and calculations for determining of the quantity of total HAP emitted during the pressure release).

(6) *Periodic Reports.* For existing and new affected sources, the owner or operator shall submit Periodic Reports as specified in paragraphs (e)(6)(i) through (ix) of this section. In addition, for equipment leaks subject to § 63.1434, the owner or operator shall submit the information specified in the HON periodic reporting requirements in § 63.182(d), and for heat exchange systems subject to § 63.1434, the owner or operator shall submit the information specified in the HON heat exchange system reporting requirements in § 63.104(f)(2), as part of the Periodic Report required by this paragraph (e)(6).

(i) Except as specified in paragraphs (e)(6)(viii) of this section, a report containing the information in paragraph

(e)(6)(ii) of this section or paragraphs (e)(6)(iii) through (vii) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180-day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(ii) If none of the compliance exceptions in paragraphs (e)(6)(iii) through (vii) of this section occurred during the 6-month period, the Periodic Report required by paragraph (e)(6)(i) of this section shall be a statement that there were no compliance exceptions, as described in this paragraph, for the 6-month period covered by that report and that none of the activities specified in paragraphs (e)(6)(iii) through (vii) of this section occurred during the period covered by that report.

(iii) For an owner or operator of an affected source complying with the provisions of §§ 63.1432 through 63.1433 for any emission point, Periodic Reports shall include:

(A) All information specified in the HON periodic reporting requirements in § 63.122(a)(4) for storage vessels and in § 63.146(c) through § 63.146(f) for process wastewater.

(B) The daily average values of monitored parameters for all excursions, as defined in § 63.1438(f).

(C) The periods when monitoring data were not collected shall be specified; and

(D) The information in paragraphs (e)(6)(iii)(D)(1) through (3) of this section, as applicable:

(1) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the

owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This notification may be submitted at any time.

(2) Notification if one or more emission points (other than equipment leak components subject to § 63.1434), or one or more PMPU is added to an affected source. The owner or operator shall submit the information contained in paragraphs (e)(6)(iii)(D)(2)(i) and (ii) of this section.

(i) A description of the addition to the affected source.

(ii) Notification of the group status or control requirement for the additional emission point or all emission points in the PMPU.

(3) For gas streams sent for disposal pursuant to § 63.113(i) or for process wastewater streams sent for treatment pursuant to § 63.132(g), reports of changes in the identity of the treatment facility or transferee.

(E) The information in paragraph (b)(1)(ii) of this section for reports of malfunctions.

(iv) If any performance tests are reported in a Periodic Report, the following information shall be included:

(A) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in paragraph (e)(5)(i)(B) of this section.

(B) For additional tests performed for the same kind of emission point using the same method, results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(v) The results for each change made to a primary product determination for a PMPU made under § 63.1420(e)(3) or (10).

(vi) The results for each reevaluation of the applicability of this subpart to a storage vessel that begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or a storage vessel that ceases to receive material from (or send material to) a process unit that was included in the initial determination, in accordance with § 63.1420(f)(8).

(vii) The Periodic Report required by the equipment leak provisions in § 63.1434(f) shall be submitted as part of the Periodic Report required by paragraph (e)(6) of this section.

(viii) The owner or operator of an affected source shall submit quarterly reports for particular emission points and process sections as specified in paragraphs (e)(6)(viii)(A) through (D) of this section.

(A) The owner or operator of an affected source shall submit quarterly reports for a period of 1 year for an emission point or process section if the emission point or process section meets the conditions in paragraph (e)(6)(viii)(A)(I) or (2) of this section.

(I) A combustion, recovery, or recapture device for a particular emission point or process section has one or more excursions, as defined in § 63.1438(f), in two consecutive semi-annual reporting periods; or

(2) The Administrator requests the owner or operator to submit quarterly reports for that emission point or process section.

(B) The quarterly reports shall include all information specified in paragraphs (e)(6)(iii) through (vii) of this section, as applicable to the emission point or process section for which quarterly reporting is required under paragraph (e)(6)(viii)(A) of this section. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (e)(6)(i) of this section.

(C) Quarterly reports shall be submitted no later than 60 days after the end of each quarter.

(D) After quarterly reports have been submitted for an emission point for 1 year without one or more excursions occurring (during that year), the owner or operator may return to semiannual reporting for the emission point or process section.

(ix) For pressure relief devices in organic HAP service, Periodic Reports must include the information specified in paragraphs (e)(6)(ix)(A) through (C) of this section.

(A) For pressure relief devices in organic HAP service subject to § 63.1434(c), report confirmation that all

monitoring to show compliance was conducted within the reporting period.

(B) For pressure relief devices in organic HAP gas or vapor service subject to § 63.1434(c)(2), report any instrument reading of 500 ppm above background or greater, more than 5 calendar days after the pressure release.

(C) For pressure relief devices in organic HAP service subject to § 63.1434(c)(3), report each pressure release to the atmosphere, including the following information:

(1) The source, nature, and cause of the pressure release.

(2) The date, time, and duration of the pressure release.

(3) The quantity of total HAP emitted during the pressure release and the method used for determining this quantity.

(4) The actions taken to prevent this pressure release.

(5) The measures adopted to prevent future such pressure

(7) *Other reports.* Other reports shall be submitted as specified in paragraphs (e)(7)(i) through (iii) of this section.

(i) For storage vessels, the notifications of inspections required by § 63.1432 shall be submitted, as specified in the HON storage vessel provisions in § 63.122(h)(1) and (2).

(ii) When the conditions at § 63.1420(e)(3)(iii), (e)(9), or (e)(10) are met, reports of changes to the primary product for a PMPU or process unit, as required by § 63.1420(e)(3)(iii), (e)(9), or (e)(10)(iii), respectively, shall be submitted.

(iii) Owners or operators of PMPU or emission points (other than equipment leak components subject to § 63.1434) that are subject to provisions for changes or additions to plant sites in § 63.1420(g)(1) or (2) shall submit a report as specified in paragraphs (e)(7)(iii)(A) and (B) of this section.

(A) Reports shall include:

(1) A description of the process change or addition, as appropriate;

(2) The planned start-up date and the appropriate compliance date, according to § 63.1420(g)(1) or (2); and

(3) Identification of the group status of emission points (except equipment leak components subject to the requirements in § 63.1434) specified in

paragraphs (e)(7)(iii)(A)(3)(i) through (iii) of this section, as applicable.

(i) All the emission points in the added PMPU, as described in § 63.1420(g)(1).

(ii) All the emission points in an affected source designated as a new affected source under § 63.1420(g)(2)(i).

(iii) All the added or created emission points as described in § 63.1420(g)(2)(ii) or (iii).

(4) If the owner or operator wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or record-keeping, alternative controls, or wishes to establish parameter monitoring levels according to the procedures contained in § 63.1438(c) or (d), a Precompliance Report shall be submitted in accordance with paragraph (e)(7)(iii)(B) of this section.

(B) Reports shall be submitted as specified in paragraphs (e)(7)(iii)(B)(1) through (3) of this section, as appropriate.

(1) Owners or operators of an added PMPU subject to § 63.1420(g)(1) shall submit a report no later than 180 days prior to the compliance date for the PMPU.

(2) Owners or operators of an affected source designated as a new affected source under § 63.1420(g)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source.

(3) Owners and operators of any emission point (other than equipment leak components subject to § 63.1434) subject to § 63.1420(g)(2)(ii) or (iii) shall submit a report no later than 180 days prior to the compliance date for those emission points.

(8) *Operating permit application.* An owner or operator who submits an operating permit application instead of a Precompliance Report shall submit the information specified in paragraph (e)(4) of this section, as applicable, with the operating permit application.

(9) *Electronic reporting.* Within 60 days after the date of completing each performance test (as defined in § 63.2), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by this subpart according to the

methods specified in paragraphs (e)(9)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA-provided software, the owner or operator shall submit the results of the performance test to the EPA by direct computer-to-computer electronic transfer via EPA-provided software, unless otherwise approved by the Administrator. Owners or operators, who claim that some of the information being submitted for performance tests is confidential business information (CBI), must submit a complete file using EPA-provided software that includes information claimed to be CBI on a compact disk, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA by direct computer-to-computer electronic transfer via EPA-provided software.

(ii) For any performance test conducted using test methods that are not compatible with the EPA-provided software, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.

(f) *Alternative monitoring parameters.* The owner or operator who has been directed by any section of this subpart, or any section of another subpart referenced by this subpart, that specifically references this paragraph to set unique monitoring parameters, or who requests approval to monitor a different parameter than those listed in § 63.1432 for storage vessels, § 63.1427 for ECO, § 63.1429 for process vents, or § 63.143 for process wastewater shall submit the information specified in paragraphs (f)(1) through (3) of this section in the Precompliance Report, as required by paragraph (e)(4) of this section. The owner or operator shall retain for a period of 5 years each record required by paragraphs (f)(1) through (3) of this section.

(1) The required information shall include a description of the parameter(s) to be monitored to ensure the combus-

tion, recovery, or recapture device; control technique; or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).

(2) The required information shall include a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation, the schedule for this demonstration, and a statement that the owner or operator will establish a level for the monitored parameter as part of the Notification of Compliance Status report required in paragraph (e)(5) of this section, unless this information has already been included in the operating permit application.

(3) The required information shall include a description of the proposed monitoring, recordkeeping, and reporting system, to include the frequency and content of monitoring, recordkeeping, and reporting. Further, the rationale for the proposed monitoring, recordkeeping, and reporting system shall be included if either condition in paragraph (f)(3)(i) or (ii) of this section is met:

(i) If monitoring and recordkeeping is not continuous; or

(ii) If reports of daily average values will not be included in Periodic Reports when the monitored parameter value is above the maximum level or below the minimum level as established in the operating permit or the Notification of Compliance Status.

(g) *Alternative continuous monitoring and recordkeeping.* An owner or operator choosing not to implement the continuous parameter operating and recordkeeping provisions listed in § 63.1429 for process vents, and § 63.1433 for wastewater, may instead request approval to use alternative continuous monitoring and recordkeeping provisions according to the procedures specified in paragraphs (g)(1) through (4) of this section. Requests shall be submitted in the Precompliance Report as specified in paragraph (e)(4)(iv) of this section, and shall contain the information specified in paragraphs (g)(2)(ii) and (g)(3)(ii) of this section, as applicable.

(1) The provisions in the General Provisions requirements for the use of an alternative monitoring method in § 63.8(f)(5)(i) shall govern the review and approval of requests.

(2) An owner or operator of an affected source that does not have an automated monitoring and recording system capable of measuring parameter values at least once during approximately equal 15-minute intervals and that does not generate continuous records may request approval to use a nonautomated system with less frequent monitoring, in accordance with paragraphs (g)(2)(i) and (ii) of this section.

(i) The requested system shall include visual reading and recording of the value of the relevant operating parameter no less frequently than once per hour. Daily averages shall be calculated from these hourly values and recorded.

(ii) The request shall contain:

(A) A description of the planned monitoring and recordkeeping system;

(B) Documentation that the affected source does not have an automated monitoring and recording system;

(C) Justification for requesting an alternative monitoring and recordkeeping system; and

(D) Demonstration that the proposed monitoring frequency is sufficient to represent combustion, recovery, or recapture device operating conditions, considering typical variability of the specific process and combustion, recovery, or recapture device operating parameter being monitored.

(3) An owner or operator may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once at approximately equal intervals of about 15 minutes), but that records all values that meet set criteria for variation from previously recorded values, in accordance with paragraphs (g)(3)(i) and (ii) of this section.

(i) The requested system shall be designed to:

(A) Measure the operating parameter value at least once during approximately equal 15-minute intervals;

(B) Record at least four values each hour during periods of operation;

(C) Record the date and time when monitors are turned off or on;

(D) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident;

(E) Calculate daily average values of the monitored operating parameter based on all measured data; and

(F) If the daily average is not an excursion, as defined in § 63.1438(f), the data for that operating day may be converted to hourly average values and the four or more individual records for each hour in the operating day may be discarded.

(ii) The request shall contain:

(A) A description of the monitoring system and data compression recording system, including the criteria used to determine which monitored values are recorded and retained;

(B) The method for calculating daily averages; and

(C) A demonstration that the system meets all criteria in paragraph (g)(3)(i) of this section.

(4) An owner or operator may request approval to use other alternative monitoring systems according to the procedures specified in the General Provisions' requirements for using an alternative monitoring method in § 63.8(f)(4).

(h) *Reduced recordkeeping program.* For any parameter with respect to any item of equipment, the owner or operator may implement the recordkeeping requirements in paragraph (h)(1) or (2) of this section as alternatives to the continuous operating parameter monitoring and recordkeeping provisions that would otherwise apply under this subpart. The owner or operator shall retain for a period of 5 years each record required by paragraph (h)(1) or (2) of this section.

(1) The owner or operator may retain only the daily average value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of paragraphs (h)(1)(i) through (iv) of this section are met. An owner or operator electing to comply with the requirements of paragraph (h)(1) of this section shall notify the Administrator

in the Notification of Compliance Status or, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of paragraph (h)(1) of this section.

(i) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation (e.g., a temperature reading of -200°C on a boiler), and will alert the operator by alarm or other means. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(ii) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The owner or operator shall record the occurrence of any period meeting the criteria in paragraphs (h)(1)(ii)(A) and (B) of this section. All instances in an operating day constitute a single occurrence.

(A) The running average is above the maximum or below the minimum established limits; and

(B) The running average is based on at least six 1-hour average values.

(iii) The monitoring system is capable of detecting unchanging data during periods of operation, except in circumstances where the presence of unchanging data are the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(iv) The monitoring system will alert the owner or operator by an alarm or other means, if the running average parameter value calculated under paragraph (h)(1)(ii) of this section reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(v) The owner or operator shall verify the proper functioning of the monitoring system, including its ability to

comply with the requirements of paragraph (h)(1) of this section, at the times specified in paragraphs (h)(1)(v)(A) through (C) of this section. The owner or operator shall document that the required verifications occurred.

(A) Upon initial installation.

(B) Annually after initial installation.

(C) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this section.

(vi) The owner or operator shall retain the records identified in paragraphs (h)(1)(vi)(A) through (D) of this section.

(A) Identification of each parameter, for each item of equipment, for which the owner or operator has elected to comply with the requirements of paragraph (h) of this section.

(B) A description of the applicable monitoring system(s), and how compliance will be achieved with each requirement of paragraphs (h)(1)(i) through (v) of this section. The description shall identify the location and format (e.g., on-line storage, log entries) for each required record. If the description changes, the owner or operator shall retain both the current and the most recent superseded description, as specified in paragraph (h)(1)(vi)(D) of this section.

(C) A description, and the date, of any change to the monitoring system that would reasonably be expected to affect its ability to comply with the requirements of paragraph (h)(1) of this section.

(D) The owner or operator subject to paragraph (h)(1)(vi)(B) of this section shall retain the current description of the monitoring system as long as the description is current. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The owner or operator shall retain all superseded descriptions for at least 5 years after the date of their creation. Superseded descriptions shall be retained on-site (or accessible from a central location by

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computer or other means that provides access within 2 hours after a request) for at least 6 months after their creation. Thereafter, superseded descriptions may be stored off-site.

(2) If an owner or operator has elected to implement the requirements of paragraph (h)(1) of this section for a monitored parameter with respect to an item of equipment and a period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator is no longer required to record the daily average value, for any operating day when the daily average is less than the maximum, or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of this subpart shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator.

(i) If the owner or operator elects not to retain the daily average values, the owner or operator shall notify the Administrator in the next Periodic Report. The notification shall identify the parameter and unit of equipment.

(ii) If, on any operating day after the owner or operator has ceased recording

daily average values as provided in paragraph (h)(2) of this section, there is an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator shall immediately resume retaining the daily average value for each operating day and shall notify the Administrator in the next Periodic Report. The owner or operator shall continue to retain each daily average value until another period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section.

(iii) The owner or operator shall retain the records specified in paragraph (h)(1) of this section, for the duration specified in paragraph (h) of this section. For any calendar week, if compliance with paragraphs (h)(1)(i) through (iv) of this section does not result in retention of a record of at least one occurrence or measured parameter value, the owner or operator shall record and retain at least one parameter value during a period of operation.

(iv) For the purposes of paragraph (h) of this section, an excursion means that the daily average of monitoring data for a parameter is greater than the maximum, or less than the minimum established value.

[64 FR 29439, June 1, 1999, as amended at 65 FR 26502, May 8, 2000; 71 FR 20461, Apr. 20, 2006; 79 FR 17379, Mar. 27, 2014]

TABLE 1 TO SUBPART PPP OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART PPP AFFECTED SOURCES

Reference	Applies to subpart PPP	Explanation
63.1(a)(1)	Yes	§ 63.1423 specifies definitions in addition to or that supersede definitions in § 63.2.
63.1(a)(2)	Yes.	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	§ 63.1422(f) through (k) of this subpart and § 63.160(b) identify those standards which overlap with the requirements of subparts PPP and H and specify how compliance shall be achieved.
63.1(a)(5)	No	Subpart PPP (this table) specifies the applicability of each paragraph in subpart A to subpart PPP.
63.1(a)(6)	Yes..	Reserved.
63.1(a)(7)–(9)	No	Reserved.
63.1(a)(10)	Yes.	
63.1(a)(11)	Yes.	
63.1(a)(12)–(14) ...	Yes.	§ 63.1420(a) contains specific applicability criteria.
63.1(b)(1)	No	
63.1(b)(2)	Yes.	
63.1(b)(3)	Yes.	Subpart PPP (this table) specifies the applicability of each paragraph in subpart A to subpart PPP.
63.1(c)(1)	Yes	
63.1(c)(2)	No	
63.1(c)(3)	No	Area sources are not subject to subpart PPP.
63.1(c)(4)	No	Reserved.

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Reference	Applies to subpart PPP	Explanation
63.1(c)(5)	Yes	Except that affected sources are not required to submit notifications overridden by this table.
63.1(d)	No	Reserved.
63.1(e)	Yes	
63.2	Yes	§ 63.1423 specifies those subpart A definitions that apply to subpart PPP.
63.3	Yes	
63.4(a)(1)–(3)	Yes	
63.4(a)(4)	No	Reserved.
63.4(a)(5)	Yes	
63.4(b)	Yes	
63.4(c)	Yes	
63.5(a)(1)	Yes	Except the terms “source” and “stationary source” should be interpreted as having the same meaning as “affected source.”
63.5(a)(2)	Yes	
63.5(b)(1)	Yes	Except § 63.1420(g) defines when construction or reconstruction is subject to new source standards.
63.5(b)(2)	No	Reserved.
63.5(b)(3)	Yes	
63.5(b)(4)	Yes	Except that the initial notification requirements in § 63.1439(e)(3) shall apply instead of the requirements in § 63.9(b).
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	Except that § 63.1420(g) defines when construction or reconstruction is subject to the new source standards.
63.5(c)	No	Reserved.
63.5(d)(1)(i)	Yes	
63.5(d)(1)(ii)	Yes	Except that § 63.5(d)(1)(ii)(H) does not apply.
63.5(d)(1)(iii)	No	§ 63.1439(e)(5) and § 63.1434(e) specify notification of compliance status requirements.
63.5(d)(2)	No	
63.5(d)(3)	Yes	Except § 63.5(d)(3)(ii) does not apply, and equipment leaks subject to § 63.1434 are exempt.
63.5(d)(4)	Yes	
63.5(e)	Yes	
63.5(f)(1)	Yes	
63.5(f)(2)	Yes	Except that where § 63.9(b)(2) is referred to, the owner or operator need not comply.
63.6(a)	Yes	
63.6(b)(1)	Yes	
63.6(b)(2)	Yes	
63.6(b)(3)	Yes	
63.6(b)(4)	Yes	
63.6(b)(5)	Yes	
63.6(b)(6)	No	Reserved.
63.6(b)(7)	No	
63.6(c)(1)	Yes	§ 63.1422 specifies the compliance date.
63.6(c)(2)	No	
63.6(c)(3)	No	Reserved.
63.6(c)(4)	No	Reserved.
63.6(c)(5)	Yes	
63.6(d)	No	Reserved.
63.6(e)	Yes	Except as otherwise specified for individual paragraphs.
§ 63.6(e)(1)(i)	No	See § 63.1420(h)(4) for general duty requirement.
§ 63.6(e)(1)(ii)	No	
63.6(e)(1)(iii)	Yes	
63.6(e)(2)	Yes	
§ 63.6(e)(3)	No	
§ 63.6(f)(1)	No	
63.6(f)(2)	Yes	Except 63.7(c), as referred to in § 63.6(f)(2)(iii)(D) does not apply, and except that § 63.6(f)(2)(ii) does not apply to equipment leaks subject to § 63.1434.
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Subpart PPP does not require opacity and visible emission standards.
63.6(i)(1)	Yes	
63.6(i)(2)	Yes	
63.6(i)(3)	Yes	
63.6(i)(4)(i)(A)	Yes	
63.6(i)(4)(i)(B)	No	Dates are specified in § 63.1422(e) and § 63.1439(e)(4)(i) for all emission points except equipment leaks, which are covered under § 63.182(a)(6)(i).
63.6(i)(4)(ii)	No	
63.6(i)(5)–(14)	Yes	
63.6(i)(15)	No	Reserved.
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	

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Reference	Applies to subpart PPP	Explanation
63.7(a)(2)	No	§ 63.1439(e) (5) and (6) specify the submittal dates of performance test results for all emission points except equipment leaks; for equipment leaks, compliance demonstration results are reported in the Periodic Reports.
63.7(a)(3)	Yes.	
63.7(b)	No	§ 63.1437(a)(4) specifies notification requirements.
63.7(c)	No	Except if the owner or operator chooses to submit an alternative nonopacity emission standard for approval under § 63.6(g).
63.7(d)	Yes.	
63.7(e)(1)	No	See § 63.1437(a).
63.7(e)(2)	Yes.	
63.7(e)(3)	No	Subpart PPP specifies requirements.
63.7(e)(4)	Yes.	
63.7(f)	Yes	Since a site-specific test plan is not required, the notification deadline in § 63.7(f)(2)(i) shall be 60 days prior to the performance test, and in § 63.7(f)(3) approval or disapproval of the alternative test method shall not be tied to the site-specific test plan.
63.7(g)	Yes	Except the notification of compliance status report requirements in § 63.1439(e)(5) shall apply instead of those in § 63.9(h). In addition, equipment leaks subject to § 63.1434 are not required to conduct performance tests.
63.7(h)	Yes	Except § 63.7(h)(4)(ii) is not applicable, since the site-specific test plans in § 63.7(c)(2) are not required.
63.8(a)(1)	Yes.	
63.8(a)(2)	No.	
63.8(a)(3)	No	Reserved.
63.8(a)(4)	Yes.	
63.8(b)(1)	Yes.	
63.8(b)(2)	No	Subpart PPP specifies locations to conduct monitoring.
63.8(b)(3)	Yes.	
63.8(c)(1)	Yes.	
63.8(c)(1)(i)	No..	
63.8(c)(1)(ii)	No..	
63.8(c)(1)(iii)	No..	
63.8(c)(2)	Yes.	
63.8(c)(3)	Yes.	
63.8(c)(4)	No	§ 63.1438 specifies monitoring requirements; not applicable to equipment leaks, because § 63.1434 does not require continuous monitoring systems.
63.8(c)(5)–(8)	No.	
63.8(d)	No.	
63.8(e)	No.	
63.8(f)(1)–(3)	Yes.	
63.8(f)(4)(i)	Yes	Except the timeframe for submitting request is specified in § 63.1439(f) or (g); not applicable to equipment leaks, because § 63.1434 (through subpart H of this part) specifies acceptable alternative methods.
63.8(f)(4)(ii)	Yes.	
63.8(f)(4)(iii)	Yes.	
63.8(f)(5)(i)	Yes.	
63.8(f)(5)(ii)	No.	
63.8(f)(5)(iii)	Yes.	
63.8(f)(6)	No	Subpart PPP does not require CEMs.
63.8(g)	No	Data reduction procedures specified in § 63.1439(d) and (h); not applicable to equipment leaks.
63.9(a)	Yes.	
63.9(b)	No	The initial notification requirements are specified in § 63.1439(e)(3).
63.9(c)	Yes.	
63.9(d)	Yes.	
63.9(e)	No	§ 63.1437(a)(4) specifies notification deadline.
63.9(f)	No	Subpart PPP does not require opacity and visible emission standards.
63.9(g)	No.	
63.9(h)	No	§ 63.1439(e)(5) specifies notification of compliance status requirements.
63.9(i)	Yes.	
63.9(j)	No.	
63.10(a)	Yes.	
63.10(b)(1)	No	§ 63.1439(a) specifies record retention requirements.
63.10(b)(2)	No	Subpart PPP specifies recordkeeping requirements.
63.10(b)(3)	Yes.	
63.10(c)	No	§ 63.1439 specifies recordkeeping requirements.
63.10(d)(1)	Yes.	
63.10(d)(2)	No	§ 63.1439(e)(5) and (6) specify performance test reporting requirements; not applicable to equipment leaks.
63.10(d)(3)	No	Subpart PPP does not require opacity and visible emission standards.
63.10(d)(4)	Yes.	
63.10(d)(5)	No	See § 63.1439(b)(1)(ii) for malfunction reporting requirements.
63.10(e)	No	§ 63.1439 specifies reporting requirements.
63.10(f)	Yes.	

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Reference	Applies to subpart PPP	Explanation
63.11	Yes.	Except that the authority of § 63.177 (for equipment leaks) will not be delegated to States.
63.12	Yes	
63.13–63.15	Yes.	

[65 FR 26502, May 8, 2000, as amended at 71 FR 20461, Apr. 20, 2006; 79 FR 17381, Mar. 27, 2014]

TABLE 2 TO SUBPART PPP OF PART 63—APPLICABILITY OF HON PROVISIONS TO SUBPART PPP AFFECTED SOURCES

Reference	Applies to subpart PPP	Explanation	Applicable section of subpart PPP
Subpart F:			
63.100	No.	Several definitions from 63.101 are referenced at 63.1423.	63.1423.
63.101	Yes		
63.102–63.103.	No.		
63.104	Yes	With the differences noted in 63.1435(b) through (d)	63.1435.
63.105	Yes	With the differences noted in 63.1433(b)	63.1433.
63.106	No.		
Subpart G:			
63.107	No.	Several definitions from 63.111 are incorporated by reference into 63.1423.	63.1423.
63.110	No.		
63.111	Yes		
63.112	No.	For THF facilities, with the differences noted in 63.1425(f)(1) through (f)(10).	63.1425.
63.113–63.118.	Yes		
	No		
63.119–63.123.	Yes	For epoxide facilities, except that 63.115(d) is used for TRE determinations.	63.1428.
63.124–63.125.	Yes	With the differences noted in 63.1432(b) through 63.1432(p).	63.1432.
63.126–63.130.	No	Reserved.	
63.131	No	Reserved.	63.1433.
63.132–63.147.	Yes		
63.148–63.149.	Yes		
63.150	No.	With the differences noted in 63.1432(b) through 63.1432(p) and 63.1433(a)(1) through 63.1433(a)(19).	63.1432 and 63.1433.
63.151–63.152.	No.		
63.153	No		
Subpart H:			
63.160–63.182.	Yes	Subpart PPP affected sources shall comply with all requirements of subpart H, with the differences noted in 63.1422(d), 63.1422(h), and 63.1434.	63.1421
Subpart U:			
63.480–63.487.	No.	Portions of 63.488(b) and (e) are cross-referenced in subpart PPP..	63.1434
63.488	Yes		
63.489–63.506.	No.		

[64 FR 29439, June 1, 1999, as amended at 79 FR 17382, Mar. 27, 2014]

TABLE 3 TO SUBPART PPP OF PART 63—GROUP 1 STORAGE VESSELS AT EXISTING AND NEW AFFECTED SOURCES

Vessel capacity (cubic meters)	Vapor Pressure ^a (kilopascals)
75 ≤ capacity <151	≥13.1
capacity ≥151	≥5.2

^a Maximum true vapor pressure of total organic HAP at storage temperature.

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TABLE 4 TO SUBPART PPP OF PART 63—KNOWN ORGANIC HAP FROM POLYETHER POLYOL PRODUCTS

Organic HAP/chemical name [CAS No.]
1,3 Butadiene (106990)
Epichlorohydrin (106898)
Ethylene Oxide (75218)
n-Hexane (110543)
Methanol (67561)
Propylene Oxide (75569)
Toluene (108883)

CAS No. = Chemical Abstracts Service Registry Number.

[65 FR 26505, May 8, 2000]

TABLE 5 TO SUBPART PPP OF PART 63—PROCESS VENTS FROM BATCH UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Thermal Incinerator	Firebox temperature ^a	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429. ^b 2. Record and report the average firebox temperature measured during the performance test—NCS. ^c 3. Record the daily average firebox temperature as specified in § 63.1429. 4. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR. ^{d e}
Catalytic Incinerator	Temperature upstream and downstream of the catalyst bed.	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429. ^b 2. Record and report the average upstream and downstream temperatures and the average temperature difference across the catalyst bed measured during the performance test—NCS. ^c 3. Record the daily average upstream temperature and temperature difference across catalyst bed as specified in § 63.1429. 4. Report all daily average upstream temperatures that are below the minimum upstream temperature established in the NCS or operating permit—PR. ^{d e} 5. Report all daily average temperature differences across the catalyst bed that are below the minimum difference established in the NCS or operating permit—PR. ^{d e} 6. Report all instances when monitoring data are not collected. ^e

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Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Boiler or Process Heater with a design heat input capacity less than 44 megawatts and where the process vents are <i>not</i> introduced with or used as the primary fuel.	Firebox temperature ^a	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average firebox temperature measured during the performance test—NCS.^c 3. Record the daily average firebox temperature as specified in § 63.1429.^d 4. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e}
Flare	Presence of a flame at the pilot light.	<ol style="list-style-type: none"> 1. Hourly records of whether the monitor was continuously operating during batch emission episodes selected for control and whether a flame was continuously present at the pilot light during each hour. 2. Record and report the presence of a flame at the pilot light over the full period of the compliance determination—NCS.^c 3. Record the times and durations of all periods during batch emission episodes when all flames at the pilot light of a flare are absent or the monitor is not operating. 4. Report the times and durations of all periods during batch emission episodes selected for control when all flames at the pilot light of a flare are absent—Pr.^d
Absorber ^f	Liquid flow rate into or out of the scrubber, or the pressure drop across the scrubber.	<ol style="list-style-type: none"> 1. Records every 15 minutes, as specified in § 63.1429.^b 2. Record and report the average liquid flow rate into or out of the scrubber, or the pressure drop across the scrubber, measured during the performance test—NCS. 3. Record the liquid flow rate into or out of the scrubber, or the pressure drop across the scrubber, every 15 minutes, as specified in § 63.1429. 4. Report all scrubber flow rates or pressure drop values that are below the minimum operating value established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e}
	pH of the scrubber	<ol style="list-style-type: none"> 1. Once daily records as specified in § 63.1429.^b 2. Record and report the average pH of the scrubber effluent measured during the performance test—NCS.^c 3. Record at least once daily the pH of the scrubber effluent. 4. Report all pH scrubber effluent readings out of the range established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e} If a base absorbent is used, report all pH values that are below the minimum operating values. If an acid absorbent is used, report all pH values that are above the maximum operating values.
Condenser ^f	Exit (product side) temperature	<ol style="list-style-type: none"> 1. Continuous records as specified in § 63.1429.^b 2. Record and report the average exit temperature measured during the performance test—NCS. 3. Record the daily average exit temperature as specified in § 63.1429. 4. Report all daily average exit temperatures that are above the maximum operating temperature established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e}
Carbon Adsorber ^f	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle(s), and.	<ol style="list-style-type: none"> 1. Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. 2. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the performance test—NCS.^c 3. Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is above the maximum flow rate established in the NCS or operating permit—PR.^{d,e}
	Temperature of the carbon bed after regeneration and within 15 minutes of completing any cooling cycle(s).	<ol style="list-style-type: none"> 1. Record the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s). 2. Record and report the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s) measured during the performance test—NCS.^c

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Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Absorber, Condenser, and Carbon Adsorber (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device.	<ol style="list-style-type: none"> Report all carbon bed regeneration cycles when the temperature of the carbon bed after regeneration, or within 15 minutes of completing any cooling cycle(s), is above the maximum temperature established in the NCS or operating permit—PR.^{d,e} Continuous records as specified in § 63.1429.^b Record and report the average concentration level or reading measured during the performance test—NCS. Record the daily average concentration level or reading as specified in § 63.1429. Report all daily average concentration levels or readings that are above the maximum concentration or reading established in the NCS or operating permit and all instances when monitoring data are not collected—PR.^{d,e}
All Combustion, recovery, or recapture devices.	<p>Diversion to the atmosphere from the combustion, recovery, or recapture device or.</p> <p>Monthly inspections of sealed valves.</p>	<ol style="list-style-type: none"> Hourly records of whether the flow indicator was operating during batch emission episodes selected for control and whether a diversion was detected at any time during the hour, as specified in § 63.1429. Record and report the times of all periods during batch emission episodes selected for control when emissions are diverted through a bypass line, or the flow indicator is not operating—PR.^d Records that monthly inspections were performed as specified in § 63.1429. Record and report all monthly inspections that show that valves are in the diverting position or that a seal has been broken—PR.^d
ECO	Time from the end of the epoxide feed, or the epoxide partial pressure in the reactor or direct measurement of epoxide concentration in the reactor liquid at the end of the ECO.	<ol style="list-style-type: none"> Records at the end of each batch, as specified in § 63.1427(i). Record and report the average parameter value of the parameters chosen, measured during the performance test. Record the batch cycle ECO duration, epoxide partial pressure, or epoxide concentration in the liquid at the end of the ECO Report all batch cycle parameter values outside of the ranges established in accordance with § 63.1427(i)(3) and all instances when monitoring data were not collected—PR.^{d,e}

^a Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

^b "Continuous records" is defined in § 63.111.

^c NCS = Notification of Compliance Status described in § 63.1429.

^d PR = Periodic Reports described in § 63.1429.

^e The periodic reports shall include the duration of periods when monitoring data are not collected as specified in § 63.1439.

^f Alternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table.

TABLE 6 TO SUBPART PPP OF PART 63—PROCESS VENTS FROM CONTINUOUS UNIT OPERATIONS—MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Thermal Incinerator	Firebox temperature ^a	<ol style="list-style-type: none"> Continuous records as specified in § 63.1429.^b Record and report the average firebox temperature measured during the performance test—NCS.^c Record the daily average firebox temperature for each operating day. Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when sufficient monitoring data are not collected—PR.^{d,e}
Catalytic Incinerator	Temperature upstream and downstream of the catalyst bed.	<ol style="list-style-type: none"> Continuous records as specified in § 63.1429.^b Record and report the average upstream and downstream temperatures and the average temperature difference across the catalyst bed measured during the performance test—NCS^c Record the daily average upstream temperature and temperature difference across catalyst bed for each operating day. Report all daily average upstream temperatures that are below the minimum upstream temperature established in the NCS or operating permit—PR.^{d,e}

Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Boiler or Process Heater with a design heat input capacity less than 44 megawatts and where the process vents are <i>not</i> introduced with or used as the primary fuel.	Firebox temperature ^a	<ol style="list-style-type: none"> Report all daily average temperature differences across the catalyst bed that are below the minimum difference established in the NCS or operating permit—PR. ^{d e} Report all operating days when insufficient monitoring data are collected. ^e Continuous records as specified in § 63.1429. ^b Record and report the average firebox temperature measured during the performance test—NCS ^c Record the daily average firebox temperature for each operating day. ^d Report all daily average temperatures that are below the minimum operating temperature established in the NCS or operating permit and all instances when insufficient monitoring data are collected—PR. ^{d e}
Flare	Presence of a flame at the pilot light.	<ol style="list-style-type: none"> Hourly records of whether the monitor was continuously operating and whether a flame was continuously present at the pilot light during each hour. Record and report the presence of a flame at the pilot light over the full period of the compliance determination—NCS. ^c Record the times and durations of all periods when all flames at the pilot light of a flare are absent or the monitor is not operating. Report the times and durations of all periods when all flames at the pilot light of a flare are absent—Pr. ^d
Absorber ^f	Exit temperature of the absorbing liquid, and.	<ol style="list-style-type: none"> Continuous records as specified in § 63.1429. ^b Record and report the exit temperature of the absorbing liquid averaged over the full period of the TRE determination—NCS. ^c Record the daily average exit temperature of the absorbing liquid for each operating day. Report all the daily average exit temperatures of the absorbing liquid that are below the minimum operating value established in the NCS or operating—PR. ^{d e}
	Exit specific gravity for the absorbing liquid.	<ol style="list-style-type: none"> Continuous records as specified in § 63.1429. ^b Record and report the exit specific gravity averaged over the full period of the TRE determination—NCS. Record the daily average exit specific gravity for each operating day. Report all daily average exit specific gravity values that are below the minimum operating value established in the NCS or operating—PR. ^{d e}
Condenser ^f	Exit (product side) temperature	<ol style="list-style-type: none"> Continuous records as specified in § 63.1429. ^b Record and report the exit temperature averaged over the full period of the TRE determination—NCS. Record the daily average exit temperature for each operating day. Report all daily average exit temperatures that are above the maximum operating temperature established in the NCS or operating—PR. ^{d e}
Carbon Adsorber ^f	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle(s), and.	<ol style="list-style-type: none"> Record of total regeneration stream mass or volumetric flow for each carbon bed regeneration cycle. Record and report the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the TRE determination—NCS. ^c Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is above the maximum flow rate established in the NCS or operating permit—PR. ^{d e}
	Temperature of the carbon bed after regeneration and within 15 minutes of completing any cooling cycle(s).	<ol style="list-style-type: none"> Record the temperature of the carbon bed after each regeneration and within 15 minutes of completing any cooling cycle(s). Record and report the temperature of the carbon bed after each regeneration during the period of the TRE determination—NCS ^c Report all carbon bed regeneration cycles when the temperature of the carbon bed after regeneration is above the maximum temperature established in the NCS or operating permit—PR. ^{d e}

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Control technique	Parameter to be monitored	Recordkeeping and reporting requirements for monitored parameters
Absorber, Condenser, and Carbon Adsorber (as an alternative to the above).	Concentration level or reading indicated by an organic monitoring device at the outlet of the recovery device.	1. Continuous records as specified in § 63.1429. ^b 2. Record and report the concentration level or reading averaged over the full period of the TRE determination—NCS. 3. Record the daily average concentration level or reading for each operating day. 4. Report all daily average concentration levels or readings that are above the maximum concentration or reading established in the NCS or operating—PR. ^{d e}
All Combustion, recovery, or recapture devices.	Diversion to the atmosphere from the combustion, recovery, or recapture device or.	1. Hourly records of whether the flow indicator was operating and whether a diversion was detected at any time during each hour. 2. Record and report the times of all periods when the vent stream is diverted through a bypass line, or the flow indicator is not operating—PR. ^d
	Monthly inspections of sealed valves.	1. Records that monthly inspections were performed as specified in § 63.1429. 2. Record and report all monthly inspections that show that valves are in the diverting position or that a seal has been broken—PR. ^d

^a Monitor may be installed in the firebox or in the ductwork immediately downstream of the firebox before any substantial heat exchange is encountered.

^b "Continuous records" is defined in § 63.111.

^c NCS = Notification of Compliance Status described in § 63.1429.

^d PR = Periodic Reports described in § 63.1429.

^e The periodic reports shall include the duration of periods when monitoring data are not collected as specified in § 63.1439.

^f Alternatively, these devices may comply with the organic monitoring device provisions listed at the end of this table.

TABLE 7 TO SUBPART PPP OF PART 63—OPERATING PARAMETERS FOR WHICH MONITORING LEVELS ARE REQUIRED TO BE ESTABLISHED FOR PROCESS VENT STREAMS

Control technique	Parameters to be monitored	Established operating parameter(s)
Thermal incinerator	Firebox temperature	Minimum temperature.
Catalytic incinerator	Temperature upstream and downstream of the catalyst bed.	Minimum upstream temperature; and minimum temperature difference across the catalyst bed.
Boiler or process heater	Firebox temperature	Minimum temperature.
Absorber	Liquid flow rate or pressure drop; and pH of scrubber effluent, if an acid or base absorbent is used.	Minimum flow rate or pressure drop; and maximum pH if an acid absorbent is used, or minimum pH if a base absorbent is used.
Condenser	Exit temperature	Maximum temperature.
Carbon adsorber	Total regeneration stream mass or volumetric flow during carbon bed regeneration cycle; and temperature of the carbon bed after regeneration (and within 15 minutes of completing any cooling cycle(s)).	Maximum mass or volumetric flow; and maximum temperature.
Extended Cookout (ECO)	Time from the end of the epoxide feed to the end of the ECO, or the reactor epoxide partial pressure at the end of the ECO, or the epoxide concentration in the reactor liquid at the end of the ECO.	Minimum duration, or maximum partial pressure at the end of ECO, or maximum epoxide concentration in the reactor liquid at the end of ECO.
Other devices (or as an alternate to the above). ^a	HAP concentration level or reading at outlet of device.	Maximum HAP concentration or reading.

^a Concentration is measured instead of an operating parameter.

TABLE 8 TO SUBPART PPP OF PART 63—ROUTINE REPORTS REQUIRED BY THIS SUBPART

Reference	Description of report	Due date
§ 63.1439(b) and subpart A of this part.	Refer to § 63.1439(b), Table 1 of this subpart, and to subpart A of this part.	Refer to subpart A of this part.

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Reference	Description of report	Due date
§ 63.1439(e)(3)	Initial notification	New affected sources w/ initial start-up at least 90 days after June 1, 1999: submit the application for approval of construction or reconstruction in lieu of the initial notification report. New affected sources w/ initial start-up prior to 90 days after June 1, 1999: by 90 days after June 1, 1999.
§ 63.1439(e)(4)	Precompliance Report ^a	Existing affected sources: 12 months prior to compliance date. New affected sources: with the application for approval of construction or reconstruction.
§ 63.1439(e)(5)	Notification of Compliance Status ^b	Within 150 days after the compliance date.
§ 63.1439(e)(6)	Periodic Reports	Semiannually, no later than 60 days after the end of each 6-month period. See § 63.1439(e)(6)(i) for the due date for this report.
§ 63.1439(e)(6)(iii)	Quarterly reports for sources with excursions (upon request of the Administrator).	No later than 60 days after the end of each quarter.
§ 63.506(e)(7)(i)	Storage Vessels Notification of Inspection.	At least 30 days prior to the refilling of each storage vessel or the inspection of each storage vessel.

^aThere may be two versions of this report due at different times; one for equipment subject to § 63.1434 and one for other emission points subject to this subpart.

^bThere will be two versions of this report due at different times; one for equipment subject to § 63.1434 and one for other emission points subject to this subpart.

[65 FR 26506, May 8, 2000]